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ABSTRACT

Summarized are programs and research projects for gifted high school students conducted by the Research and Guidance Laboratory at the University of Wisconsin (Madison). Noted is the laboratory's role as a center for development and demonstration of counseling, guidance, and educational methods which have been used with 3,500 gifted students in Wisconsin high schools. Research projects and papers developed by the laboratory are cited and sometimes summarized. Test data and trends from 1965 to 1976 are presented graphically. The development of the longitudinal case study is explained and a sample given. Considered are the following aspects of counseling and guidance of the gifted at the laboratory: identification, counseling the gifted student, career development, and curriculum planning. Guidance questionnaires and discussion topics are given. Noted is the role of laboratory staff in providing consultation services to local high schools and in the development of inservice training packages. Appended are a list of projects in individual high schools, a list of resources (national and state), and a bibliography. (DB)

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Laboratory Counseling Programs

Counseling and Program Development for Gifted

by

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The University of Wisconsin-Madison

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SECTION I

Introduction

Education of Gifted Students

1. The entire community should educate the gifted, because 'for too long we have persecuted and discouraged the gifted child by forcing him into molds of conformity to the average both in the community and in school.'
2. The school should take the lead in identifying accurately the gifted children and in planning appropriate educational programs for them.
3. Children and their parents should be given full information about abilities, interests, strengths, and weaknesses that tests and counseling procedures reveal.
4. Grade and curriculum boundary lines for the gifted student should be eliminated from all levels of the school system.
5. The organization, meaning, and use of knowledge in all fields should form the content of the program of studies for the gifted.
6. Maximum academic achievement records should be maintained as goals for the gifted.

--Lindley J. Stiles, Dean (1955-1966)
School of Education
University of Wisconsin-Madison

Some years ago a small group of faculty and administrators at the University of Wisconsin-Madison took up the challenge expressed in the principles outlined above. The tangible result of their leadership and commitment is the Research and Guidance Laboratory, which this year marks its nineteenth year of continuous longitudinal research and service work with some 3,500 gifted and talented young people, their parents, and their teachers and counselors from 90 school systems throughout Wisconsin.

The Research and Guidance Laboratory is a center for advanced study and development of procedures for education and guidance of promising students as they progress through high school and into adult citizenship. The Laboratory was founded in 1957 on the tenet that the problem of identifying and providing for such students is basically an obligation of the schools. The Laboratory attempts to stimulate and assist high school faculties to develop effective local practices which meet this obligation. At the same time, it carries on research on methods of discovery and development of youth of superior promise in any field. The Laboratory is a research-through-service organization which attempts to demonstrate what a joint attack by a university, public schools, and parents can accomplish in the conservation and development of human resources.

Faculties of cooperating high schools in Wisconsin select ninth-grade students on the basis of multiple criteria developed by the Laboratory staff. The selection procedures used have resulted in a group of some 3,500 participants whose average mental test scores are in the upper 3 to 5 percent of

students in their age range and grade in school. There is, of course, systematic variance on such criteria as mental test performance, depending upon characteristics of local school populations from which the participants are drawn. It is assumed that in every school there are some students whose potentialities warrant special attention and programming which the school can develop and provide.

The function of the Laboratory is to serve as a demonstration and development center for counseling, guidance, and planning activities for all cooperating high schools. The students who participate from each school receive direct benefits of these activities, while at the same time the school is aided in supplementing and augmenting existing programs, or in inaugurating new procedures and services which will better meet guidance needs of students.

A central purpose of the Laboratory program, then, is to improve high school experiences and enhance the development of potentially gifted students. This purpose extends not only to those young people who are selected to participate in the program, but also to the many others who attend schools where Laboratory influences are felt. Procedures whereby this general objective is pursued involve more specific goals for students, parents, and schools.

1. Selected students come to Laboratory facilities in Madison for one-day visits at least once a year during their period of high school attendance. A full day of activities is arranged for them, including testing

and evaluation, analysis of written and oral performances, visits to classes and laboratories, and conferences with University staff members in any area of interest. These procedures are designed to:

- a. broaden their horizons with respect to educational and vocational opportunities.
- b. develop realistic self-concepts about their own strengths and interests.
- c. foster plans for suitable educational programs.
- d. discover methods for overcoming limitations.
- e. encourage development of personal and academic strengths.
- f. provide counsel on any matter which may influence fullest development of the individual student.

Findings are interpreted to the students and the implications are considered in individual counseling sessions. Highly individualized adaptations to particular characteristics and needs are emphasized throughout.

2. Students' visits to the Laboratory are followed closely by visits of Laboratory staff teams to schools they attend. At the schools, conferences are held with parents of each participating student. Laboratory findings are interpreted to the parents and supplemented by information parents give. Suggestions are made to parents regarding ways they may facilitate their child's growth. These conferences are designed to:

- a. inform parents about characteristics of their children which they may not know.

- b. stimulate action of parents to meet developmental needs their child shows.
- c. facilitate communication between the parents, the school, and the student.
- d. discover points of view and other parental characteristics which affect the student's development.

3. On the basis of activities and performances at the Laboratory, a written report regarding each individual student is sent to the school he/she attends. These reports have been received and circulated among teachers prior to the visit in the school by Laboratory staff. Ordinarily reports contain information about the student's performance, interests, and needs, together with suggestions the school may implement to provide desired educational or personal experiences. After parent conferences are completed a teachers' meeting or in-service training program is held. Specific suggestions to the school are discussed, and general principles for guidance and education of gifted students are emphasized. Usually by means of the case approach, attempts are made to solve problems encountered in educating gifted students. Objectives of these training sessions are:

- a. stimulation of and assistance with the processes of identification of gifted students.
- b. encouragement and assistance in making special provisions for development of gifted students, and stimulation to do so for other students.
- c. provision of information about educational and vocational requirements and opportunities particularly applicable to gifted students.

- d. encouragement of innovation and experimentation in school procedures for gifted students as well as for other students.
- e. demonstration of appropriate guidance services for high school students.

Laboratory Support

Financial support for the Laboratory comes from participating schools, various units of The University of Wisconsin, and from gifts and grants obtained from sources outside Wisconsin. Cooperating schools pay about one-third of all costs through fees to the Laboratory and travel expenses for participating students. The College of Engineering, School of Education, College of Letters and Science, School of Business, College of Agricultural and Life Sciences, Medical School, University Extension, University Center System, and the Central Administration of The University of Wisconsin have all contributed substantially to the Laboratory program. Grants from the Wisconsin Alumni Research Foundation and the Cooperative Research Branch of the U.S. Office of Education have also been utilized.

Another important resource has been the faculty of all departments of The University of Wisconsin at Madison. These persons, together with a variety of professional persons outside the University, have contributed thousands of hours of time in conducting individual interviews with young people who are interested in their career fields. This work has been a highlight of the Laboratory program and fundamental to career guidance objectives for the students.

Thus the Laboratory is truly a cooperative effort which for more than eighteen years has maintained direct, personal, longitudinal, and functional relationships between the University and more than 3,500 top students, their parents, and their teachers in every corner of the state. More than 97 percent of all student participants who have graduated from high school have enrolled in higher education programs. Many have gone on to graduate and professional study. As a group, these young people have established a very outstanding record in college.

The Laboratory is not a recruiting agency for The University of Wisconsin, but it is oriented toward post-high school education. Every attempt is made to provide students and their parents with realistic information about higher education alternatives so that students can and will choose the most appropriate courses of action for themselves. To the extent that they do this, they are expected to find challenge, success, and satisfaction in their post-high school experiences.

Research

In the foregoing section we have described the program of services offered by the Laboratory. Closely allied to this program are research activities designed to provide descriptive and evaluational data concerning schools, students, parents, and special procedures implemented to meet education and guidance needs of superior students. To date more than 80

research projects have been completed by University faculty and graduate students associated with the Laboratory. Reports of many of these studies have appeared in professional publications, but many others have never been put into print. Some of these studies are briefly abstracted in following sections of this booklet.

The nature of the Laboratory program and policy places certain constraints on research, and those constraints bear comment here. The Laboratory is a research-through-service program with at least as much emphasis given to service as to research. In the hierarchy of priorities the student comes first. No activity is undertaken unless it can be justified in terms of its potential value to participating high school students. When students come to the Laboratory they are told that the activities they take part in are to help them learn more about themselves and their environment, and to assist them in discovering opportunities and making choices important to themselves. If an activity does not appear useful to these goals, it is not instigated; and if, over time, an activity does not prove useful, it is not sustained. Any research data obtained at the Laboratory is obtained within the limits of this policy.

Consultation

Although the focus of the Laboratory has always been exclusively on the gifted and talented, current activities involve other target groups. Student appraisal, guidance and counseling concepts, and procedures developed and

tested with gifted and talented youngsters appear to have promise for use with more general student populations. While the Laboratory continues to maintain its work with gifted and talented students from cooperating schools, it is also developing research and demonstration activities organized around broader counseling and guidance program goals in other institutions. Such matters as research, development of instruments and procedures, demonstration of such procedures in actual practice, staff training, evaluation and follow-up are all areas in which the Laboratory attempts to assist schools.

It is hoped that a general profit will be derived from experiences gained through years of intensive work with the gifted and talented. This work has provided us with many examples of feasible ways to capitalize on local potentialities, and to work together--students, parents, teachers, counselors and community--in better understanding and meeting the guidance needs of all youth.

SECTION II

Gifted and Talented Students

One focus of the Research and Guidance Laboratory since its inception in 1957 has been that of research with gifted students. Based on Laboratory activities with these students, a number of research projects, workshops and presentations, and professional papers have been developed. Some of these are discussed below under the following eight headings:

1. Studies done with Laboratory longitudinal data in areas of appraisal, description, classroom procedures, counseling and guidance provisions, and post-high school choices.
2. Recent research studies dealing with various personality and developmental aspects of gifted students.
3. A recent 12-year follow-up study which examines longitudinal student data available on all current Laboratory schools over the past 12 years.
4. Revision of tests given to all participating students, as well as establishment of current norms for the Laboratory population of gifted and talented students.
5. Example of one case study of a high school youngster who has participated in the Laboratory program, along with procedures and guidelines for conducting and preparing

a case study.

6. Categories and procedures for examination of content of personal essays written by gifted students at the Laboratory and application of this information in counseling interviews and research on gifted students.
7. Collection of papers, presentations and proposals on gifted students prepared by Laboratory staff.
8. Suggested ideas and procedures for research with gifted and talented students.

Laboratory Research

One of the major purposes of the Research and Guidance Laboratory is research. This section contains written work both published and unpublished that has been generated in the Laboratory. The research is grouped under the categories of Appraisal, Descriptive, Classroom and Curriculum, Counseling and Guidance and Post-High School Choices and Achievements.

I. Appraisal

Students in the Laboratory program are a very select population. Therefore, it has been necessary to devise instruments sensitive to their advanced verbal and mathematics abilities. Oral problem solving tasks, writing samples and values clarification exercises are also used to make appraisals of these students.

A. Methods for Analyzing Personal Documents

deLemos, Thereze P. P. A descriptive study of autobiographies of a selected group of superior students. Unpublished Master's thesis, 1960.

Rothney, J. W. M. Studies in the discovery and guidance of superior students. Cooperative Research Project SAE 8961, U.S. Office of Education, 1963.

Sanborn, Marshall P., & Niemiec, Carl J. Identifying values of superior high school students. School Counselor, March 1971.

Stankowski, Wayne J. Patterns of students' writing in relation to test and academic performance. Unpublished Ph.D. Dissertation, 1967.

B. Actuarial Methods of Prediction

Journe, Robert K., & Rothney, J. W. M. Assessments of counselees writing skills by tests and essays. Vocational Guidance Quarterly, Autumn 1960.

Camp, W. L., & Rothney, J. W. M. Use of the Concept Mastery Test in study of superior high school seniors. Vocational Guidance Quarterly, Summer 1962.

Christie, Richard F. An analysis of the WITS Analogies exercise. Unpublished Master's thesis, 1966.

Connell, Karen J. The construction and use of two tests to separate high verbal from high quantitative performers at the high school level. Unpublished Master's thesis, 1963.

Gupta, Deenhandhu. A report on the investigation of the validity of the activities checklist administered at the Research and Guidance Laboratory at The University of Wisconsin. Unpublished Master's thesis, 1960.

Harrington, Patricia M. The use of free response analogy terms to assess verbal performances of superior high school students. Unpublished Master's thesis, 1965.

C. Oral Problem Solving

Cody, John J., & Rothney, J. W. M. Oral problem-solving performances of superior high school students. Personnel and Guidance Journal, January 1963.

Koopman, Norbert E. Evaluations by superior high school students of their problem solving performances. Unpublished Ph.D. Dissertation, 1964.

II. Descriptive Studies

Gifted students, like all students are unique individuals. Yet as a group they have some characteristics in common. The following studies focus on the common characteristics of gifted students in the Laboratory program.

A. Descriptive Characteristics

Bradley, Richard W., & Sanborn, Marshall P. Ordinal position of high school students identified by their teachers as superior. Journal of Educational Psychology, 1969, Vol. 60, No. 1.

Briskin, Alan S. A model of behavioral patterning. Unpublished Ph.D. Dissertation, 1970.

Burke, Margaret J. A case study approach to the development of self-concepts among a group of superior students. Unpublished Ph.D. Dissertation, 1968.

Cromett, Harvey J. Some of the reading practices of a selected group of superior high school students. Unpublished Master's thesis, 1960.

Engmann, E. V. Teye. Mental characteristics of superior children. Unpublished Master's thesis, 1959.

Kappes, Donald H. A descriptive study of the characteristics of superior college freshmen. Unpublished Master's thesis, 1963.

Konle, Carolyn. Elementary school backgrounds of fifteen superior children. Unpublished Master's thesis, 1961.

Kukla, J. G. A comparison of activities of superior students and average students at the sophomore level. Unpublished Master's thesis, 1960.

Landwehr, Virginia. The relationship between predicted and actual performances of superior students on standardized tests. Unpublished Master's thesis, 1961.

Mowsesian, Richard; Heath, Brian R. G.; & Rothney, J. W. M. Superior students' occupational preferences and their fathers' occupations. Personnel and Guidance Journal, November 1966.

Mueller, William J., & Rothney, J. W. M. Comparisons of selected descriptive and predictive statements of superior students, their parents, and their teachers. Personnel and Guidance Journal, April 1960.

Nelson, Randolph J., & Rothney, J. W. M. Television and the superior student. School and Society, Vol. 92, No. 2251, December 12, 1964.

Nighbert, Joyce Ann. Case Studies: Four superior students. Unpublished Master's thesis, 1965.

Smaby, Marlowe H. The relationship of superior students' social selves and their extracurricular activities. Unpublished Master's thesis, 1965.

B. Grouping Preferences for Superior Students

Bean, Robert A. A survey of the attitudes of a selected group of freshmen and sophomore superior secondary students toward acceleration and grouping. Unpublished Master's thesis, 1962.

Scheilbach, Lawrence. A study of the attitudes of academically-superior high school students toward homogeneously grouped classes. Unpublished Master's thesis, 1965.

C. Environmental Evidence

Hays, Donald G., & Rothney, J. W. M. Educational decision making by superior secondary-school students and their parents. Personnel and Guidance Journal, September 1961.

Hoedt, Kenneth C., & Rothney, J. W. M. Guidance for superior students: Some problems. Vocational Guidance Quarterly, Spring 1963.

Vogler, Ernest. The superior students in Mineral Point High School. Unpublished Master's thesis, 1962.

III. Classroom and Curricular Provisions

Gifted students are "special" students certainly in the sense that they have special and specific needs in schools. The following studies focus on special classroom and curriculum provisions made for gifted students.

Brahe, Champ K. College ahead of schedule: An evaluation of superior student acceleration. Unpublished Master's thesis, 1967.

Dunford, George. Practices and outcomes of an individualized program for a superior student. Unpublished Master's thesis, 1965.

Fredrickson, Ronald H. Statewide implementation of classroom practices for superior students. Exceptional Children, October 1968.

Gilbert, Marlyn. Enrichment as a means of providing for the academically superior in small public high schools. Unpublished Master's thesis, 1960.

Hoedt, Kenneth C., & Rothney, J. W. M. The high school principal and the superior student. The National Association of Secondary School Principals, March 1963.

Hogan, William F. An evaluation follow-up of students who took college courses while still in high school. Unpublished Master's thesis, 1966.

Hunt, David A. The identification and description of special provisions for enriching the educational experiences of superior students. Unpublished Master's thesis, 1964.

Kovan, Georgia G. Acceleration and early admission to college of superior high school students. Unpublished Master's thesis, 1966.

Peterson, Terrance L. Effects of counselor conducted in-service training sessions in promoting a desired teacher practice. Unpublished Ph.D. Dissertation, 1970.

Rothney, J. W. M. Fifty suggestions for providing superior students enrichment and acceleration. The Mathematics Teacher (India), May-June 1966.

Rothney, J. W. M., & Cody, J. J. The superior student and physical education. Newsletter, Wisconsin Association for Health, Physical Education, and Recreation, October 16, 1961.

Rothney, J. W. M., & Sanborn, Marshall P. Identifying and educating superior students in Wisconsin high schools. Research and Guidance Laboratory, The University of Wisconsin, 1967.

Rothney, J. W. M., & Sanborn, M. P. Promising practices in the education of superior students. Cooperative Research Project D-119; U.S. Office of Education, June 1968.

Staskal, Edward M. A study of provisions made for academically talented students in social science programs. Unpublished Master's thesis, 1967.

Steede, William D. Educational decision making by average secondary school students as compared to superior students. Unpublished Master's thesis, 1961.

Vandewater, Arlan. The influence of total teaching experience upon the classroom practice performed for superior students. Unpublished Master's thesis, 1963.

IV. Counseling and Guidance Procedures

A main emphasis of the Laboratory is to demonstrate specific guidance activities in working with gifted students. The following studies relate specifically to this area.

Alexakos, Constantinos. The effectiveness of certain guidance practices specifically designed for academically superior students. Unpublished Ph.D. Dissertation, 1965.

Atkinson, Donald R. Effect of selected behavior modification techniques on student-initiated action. Journal of Counseling Psychology

Atkinson, Donald R.; David, Jerry L.; & Sanborn, Marshall P. Behavioral techniques: Effective with superior high school students? The School Counselor, March 1972.

Atkinson, Donald R.; Peterson, Terrance L.; & Sanborn, Marshall P. The effect of class visitations on superior students' concepts of a university class. Journal of College Student Personnel,

Baillie, Royal E. Use of rating scales in analysis of personal documents of superior high school students. Unpublished Master's thesis, 1960.

Brahe, Champ K. Student actions on counselors' suggestions for superior high school students. Unpublished Ph.D. Dissertation, 1970.

Camp, W. L., & Rothney, J. W. M. Parental response to counselor's suggestions. The School Counselor, January 1970.

Henjum, Raymond J., & Rothney, J. W. M. Parental action on counselor's suggestions. Vocational Guidance Quarterly, September 1969.

Herbert, Craig. A case-study approach to the understanding of guidance activities for individual development. Unpublished Ph.D. Dissertation, 1967.

Jessell, John C., & Rothney, J. W. M. The effectiveness of parent-counselor conferences. Personnel and Guidance Journal, October 1965.

Koepe, Richard P. The effect of a one day application of guidance and counseling procedures upon selected ninth-grade students. Unpublished Ph.D. Dissertation, 1961.

Rothney, J. W. M. A statewide approach to discovery and guidance of superior students. School and Society, Summary 1961.

Rothney, J. W. M. Improving reports to parents. The National Elementary Principal, May 1966.

Rothney, J. W. M. Guidance laboratory for superior students at the University of Wisconsin. Gifted Child Quarterly, Spring 1958.

Rothney, J. W. M., & Sanborn, Marshall P. Wisconsin's research through service program for superior students. Personnel and Guidance Journal, March 1966.

Rothney, J. W. M., & Lewis, Charles W. Use of control groups in studies of guidance. Personnel and Guidance Journal, January 1969.

Rusk, Harold C. Guidance suggestions to the schools of superior high school students. Unpublished Master's thesis, 1967.

Smaby, Marlowe H. An evaluation of three systematic interview involvement procedures for accomplishing guidance goals. Unpublished Ph.D. Dissertation, 1970.

Smith, Marcia Jule. An evaluation of high school guidance services by more successful and less successful superior students. Unpublished Master's thesis, 1967.

Temple, Robert T. An analysis of the written responses of a selected group of senior students. Unpublished Master's thesis, 1961.

Whalen, Joe M. Superior students' opinions of counseling--use in evaluation and some contributing factors. Unpublished Master's thesis, 1968.

V. Post-High School Choices and Achievements

One of the most important aspects of research is its predictive usefulness. The Laboratory has engaged in both short-term and in longitudinal research.

The Laboratory is concerned with students after they graduate from high school. Follow-up studies are systematically planned for one, four and ten years after high school graduation. The following studies focus on post-high school activities both in achievement and career choices.

Alexakos, C. E. Predictive efficiency of two multivariate statistical techniques in comparison with clinical predictions. Journal of Educational Psychology, 1966, Vol. 57, No 5.

Alexakos, C. E.; Stankowski, W. M.; & Sanborn, M. P. Superior high school students' thoughts about the future and their later college achievements. Vocational Guidance Quarterly, June 1967.

Ammerman, Garmen K. Relationships between expressed preferences of superior high school seniors for major subject fields and their occupational choices as college sophomores. Unpublished Master's thesis, 1965.

Bradley, Richard W., & Sanborn, Marshall P. Using tests to predict four year patterns of college grade point. Journal of College Student Personnel, March 1971.

England, Janet E. Career choices of superior students. Unpublished Master's thesis, 1966.

Fluck, Ellen D. Relationship between choice of undergraduate major and post-baccalaureate work of counseled and noncounseled superior students. Unpublished Master's thesis, 1966.

Holmquist, Christine Helen. Superior students' reactions to the University of Wisconsin. Unpublished Master's thesis, 1968.

Houg, Martin M. Vocational choices of superior high school students--a longitudinal study. Unpublished Ph.D. Dissertation, 1970.

Lewis, Charles W.; Bradley, R. W.; & Rothney, J. W. M. Assessment of accomplishment of college students four years after high school graduation. Personnel and Guidance Journal, April 1969.

Madsen, Irv. A study of the relationship between high school activity participation and college academic performance of the graduates of 1961 who participated in the Research and Guidance Laboratory for Superior Students. Unpublished Master's thesis, 1965.

Olen, Marcia M. A descriptive follow-up study of selected superior students in college. Unpublished Master's thesis, 1965.

Peterson, Terrance L. Part-time work during high school and the career development of superior students. Unpublished Master's thesis, 1968.

Ragus, Terry. Consistency of superior students' career choices in science and non-science areas. Unpublished Master's thesis, 1968.

Richter, Roger D. The effect of the interview on clinical predictions of academic performance in college for superior students. Unpublished Ph.D. Dissertation, 1966.

Rothney, J. W. M. Studies in the discovery and guidance of superior students. Cooperative Research Project SAE 8961, U.S. Office of Education, 1963.

Ruck, Jane E. A comparison of career choice and development among academically able high school students. Unpublished Master's thesis, 1966.

Sanborn, Marshall P. Vocational choice, college choice, and scholastic success of superior students. Vocational Guidance Quarterly, Spring, 1965.

Simono, Ronald B. Prediction of science and non-science undergraduate majors among a group of male high school students. Unpublished Ph.D. Dissertation, 1965.

Winsor, Norma. A report three years after high school of the graduates of 1960 who participated in the Research and Guidance Laboratory for Superior Students. Unpublished Master's thesis, 1964.

Theses Abstracts

Completed Theses:

I. Hartz, John D. A cross-historical comparison of ten year follow-up studies of talented young people. 1973.

Purpose

This study describes differential impact of different periods in history of talented young people in terms of developmental factors of concern to school counselors. A follow-up of two matched groups of high school graduates who entered post-high school training and careers during different decades was accomplished. The groups were compared on the basis of data secured ten years after graduation regarding their current status, past experiences, and future plans. Group one graduated from high school in 1951, Group two in 1963.

Results

Current Status: In 1973, ten years after high school graduation 1963 graduates 1) were more often geographically dispersed; 2) listed fewer contacts with former classmates; 3) were less often married; 4) had fewer children; 5) more often, when married and employed, refused to select one over the other as best descriptive of their current status; 6) were more often ambivalent about their status; 7) more often chose their work for intrinsic reasons; 8) were engaged in more self-improvement activities; 9) more often wanted schools to emphasize relationship skills; and 10) wanted schools to emphasize sexual equality.

Past Experiences: Graduates of 1963: 1) had more formal education (particularly women and particularly at the graduate level); 2) were less enthusiastic and less satisfied with post-high school education; 3) were less satisfied with high school training and counseling; 4) were less satisfied with experiences during the period from graduation to follow-up; 5) sought advice from more sources making decisions; 6) were more confident in decisions they made; 7) less often voted in political elections and were more skeptical about the political process; 8) among men there were fewer veterans, but those who were veterans were more likely to remember their military experiences negatively; 9) 1963 graduates more often belonged to formal organizations, but were less often leaders of them.

Future Plans: 1963 graduates: 1) were more often planning to change careers; 2) were more often seeking employment change for intrinsic reasons; 3) and were less optimistic about the future.

Other: Male-female contrasts within the 1951 and 1963 groups were different. While there were numerous between-sex differences within the 1963 group, activities, opinions, values, and beliefs of males and females were more closely allied than were those of males and females within the 1951 group.

Observations and Conclusions

Differences between 1951 and 1963 groups might have been anticipated from an historical perspective--they appeared logically to relate to different historical events and trends. Questionnaire items used in the study

were unstable over time, and hence were inappropriate as stable criterion for guidance program evaluation.

The implications of the study were: 1) counselors professing to aid young people in their future planning must pay heed to historical times and trends; 2) instead of focusing on outcomes, counselors should emphasize processes which are less likely to be historically specific; and 3) those proposing long-term follow-up evaluation of guidance programs must develop criteria which have stability over time.

II. Martins, John R. Anne Roe's theory in relation to John Holland's personality types and selected parent-child interaction variables. 1974.

Purpose

The purpose of this research was to determine if Roe's parental types would account for Holland's vocational personality types. Three measurements of parental attitudes were used. Also, descriptive data were analyzed with regards to the relationship between mother-father parents types, vocational personality types, student attitudes at different levels, the parent students identified with, student perceptions of dominant parents, and consistency of parent behaviors.

Results

1) There was no significant association between Realistic, Intellectual, and Enterprising subjects (Holland's classification) in terms of having had accepting, concentrating, or avoiding parents (Roe's classification) when data were obtained from case histories.

2) Differences between means on the Family Relations Inventory were not significant. Fathers of Intellectual and Enterprising subjects were significantly more avoiding than fathers of Realistic subjects.

3) On Part II of the Family Relations Inventory there was no significant association between Realistic, Intellectual, and Enterprising subjects and mothers accepting, fathers accepting, or mothers-fathers concentrating. Parents of Realistic and Enterprising subjects were found to have significantly more avoiding or "insufficient information" ratings than parents of Intellectual subjects.

III. McMahon, Robert C. Value development and superior achievers. 1973.

Purpose

This research was designed to determine a) whether the value hierarchies of forty-eight superior students as identified by Niemiec in 1966 were predicative of their 1973 value hierarchies as identified in a structured interview; and b) whether there were systematic shifts in the value hierarchies of these individuals. The values identified and discussed were classified as Material (M), Recognition (R), Social (S), and Individual Development (I).

Results

1) Value hierarchies of most subjects tended to remain stable when viewed in terms of the High-Low and Extremes categories of consistency.

2) There was a marked tendency for individuals with (I) ranked first in 1966 to retain (I) as their highest ranked value, and for those with (S), (M),

and (R) ranked first in 1966 to move to (I) as their first ranked value.

3) Of values ranked second in 1966, there was an upward movement of Individual Development (I) in individual hierarchies. This was also true of values ranked third in 1966.

4) Although (I) did not stay in the low half of individual hierarchies over time, there was a strong tendency for subjects with (S), (M), and (R) ranked last in 1966 to retain those last ranked values in the low half of their 1973 value hierarchies.

IV. Engels, Dennis W. John Watson Murray Rothney, development of his published thought in counseling and guidance. 1975.

Purpose

The purpose of this study was to first trace the development of John Watson Murray Rothney's thought as documented in his published works, and second, to determine its implications for counselor education and practice.

Procedure

The following idiological areas were examined: 1) interpersonal diversity; 2) measurement in guidance; 3) sanctions and mutual goals with the school community; 4) the concept and practice of evaluation; and 5) adaptive counseling.

These five topical areas were followed through three distinct periods of Rothney's professional activity. 1) education and early work until service in World War II; 2) his move to Wisconsin and post-war activities in 1956; and 3) from the foundation of the Research and Guidance Laboratory for Superior Students early in 1951 through to formal retirement in 1971 and

subsequent publications in 1972.

The final chapter includes a summary, discussion and implications for counselor education and practice.

Current Research:

V. Colangelo, Nick. Understanding moral conflicts and resolution in superior high school students.

This study is being proposed to investigate important conflicts reported by superior students and determine which of these conflicts could be identified as moral. Conflicts will be identified as moral, categorized according to their content, and analyzed for process in judgment and resolution. Kohlberg's stages of moral development will be used to assess the level of moral reasoning involved. Implications will be discussed for the role of the counselor in helping superior students resolve moral conflicts.

VI. Zaffrann, Ronald T. A case-study approach to an understanding of factors affecting the development of internal-external locus of control in gifted and talented adolescents.

The study is designed to explore, through case studies, the development of internal-external locus of control (I-E) in gifted and talented adolescents as revealed in personal documents and interviews. If people believe that situations happen to them because of their own doing, then they operate from an internal locus of control. If they believe that situations happen to them because of luck, chance, fate, powerful others or a confusing or

powerful world, then they operate from an external locus of control.

The purposes of this study are:

- 1) To contribute to an understanding of the development of I-E in people. Previously, only data gained at isolated points in peoples' lives (e.g., measurements from an I-E scale) have been used, thereby presenting an incomplete picture.
- 2) To examine the development and meaning of I-E in gifted and talented adolescents. To date this has not been done.
- 3) To demonstrate the usefulness and richness of the case study approach, which provides an overall view of the detailed changes, the progress, and the meanings in peoples' lives. To date only statistical studies based on I-E scales have been done.
- 4) To examine the significance and meaning of I-E for different people, e.g., as it relates to various situations in their lives and to their overall value system.

Twelve Year Follow-Up Study

Since its inception in 1957, the Research and Guidance Laboratory has collected longitudinal data on gifted and talented students in Wisconsin schools.

A follow-up study was conducted with all students who have gone through the Laboratory program from currently participating Laboratory schools, that is, from 1965 through 1976. The twelve year study, by virtue of its

particular design and solid information base, is being used for various purposes:

1. Research on gifted and talented students. To provide information in a number of significant areas of school youngsters: e.g., personal/social, family, career, and academic categories.

2. Information to Laboratory schools. a) To provide information from each participating Laboratory student to parents, various school personnel and students themselves on a number of information areas which are likely to be of interest to all of them.

b) To provide information to schools' counseling and guidance departments as feedback on the kinds of programs, services, curricula and general educational provisions these students have received while in school.

c) To offer this information as a stimulus in evaluating current educational provisions and in developing new programs based on students' expressed needs and concerns.

3. Information for the Laboratory program. a) To provide Laboratory staff with information for counseling, guidance and research projects with gifted and talented students; for example, in areas of career development, identification and selection, testing, personal/social development and family variables.

b) To provide information as feedback to evaluate current Laboratory practices and provisions, and to develop new ideas and activities based on students' comments and concerns.

Tests: Graphs and Norms*

Testing is one of the methods used at the Research and Guidance Laboratory of assessing skills in superior high school students and providing information to schools for programming needs. The testing program at the Laboratory consists of the Wisconsin Inventory of Talented Students-Verbal (WITS-Verbal I); Wisconsin Inventory of Talented Students-Quantitative (WITS-Quantitative II, New Quantitative) and the Terman Concept Mastery Test-Form T (published by The Psychological Corporation, N.Y.). The WITS-Quantitative II was revised in 1973 and the revised form appears in the data as New Quantitative. The WITS-Verbal I, WITS-Quantitative II and New Quantitative were constructed from performances by superior students in the Laboratory program. The purpose of these tests was to differentiate high verbal and high quantitative performers within a superior student population. The WITS-Verbal and WITS-Quantitative and the New Quantitative are given to 9th graders and the same tests are repeated with 11th graders. The Terman Concept Mastery Test is a measure of ability to deal with abstract ideas at a high level. The test consists of two parts: I, the identification of synonyms and antonyms, and II, the completion of analysis. This test is given to 12th graders.

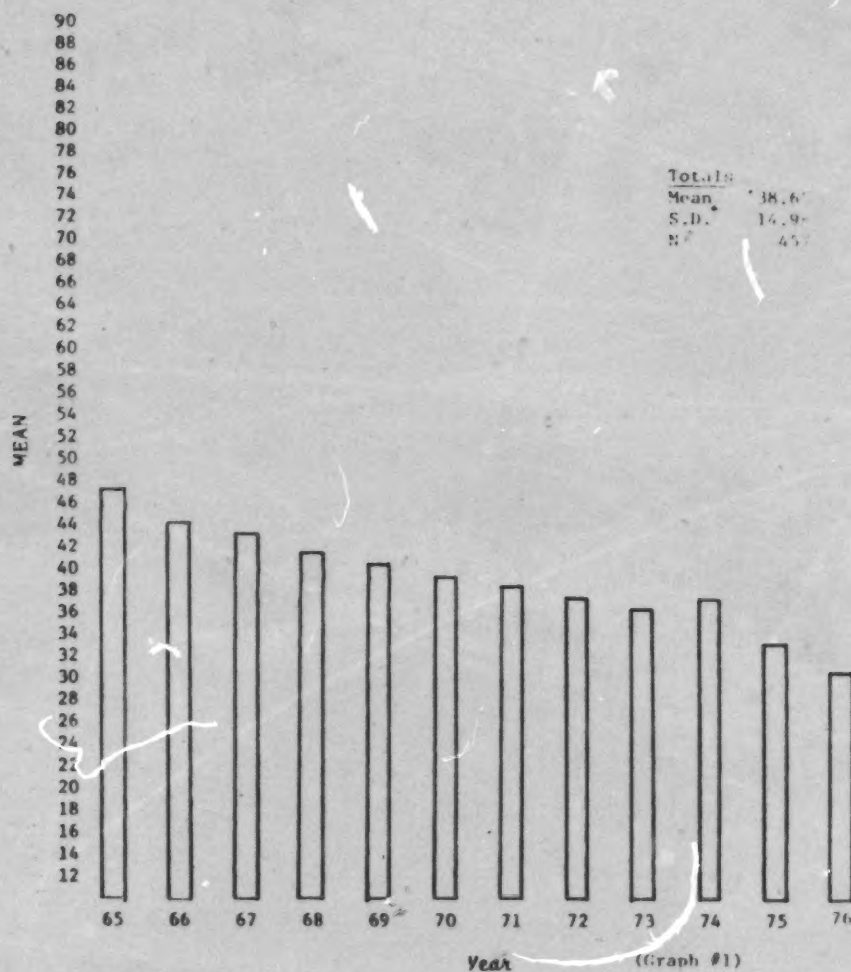
The following graphs represent test data and trends from 1965-1976. The norms are based on performances from 1971-1976.

*Test Data and Norms taken from Verbal and Quantitative Test Performance: Superior Students in Wisconsin High Schools, by Nick Colangelo and Kay Bennett, The Research and Guidance Laboratory, 1976.

III. TEST DATA & GRAPH FOR LABORATORY POPULATION

WITS-Verbal I-9th Grade
1965-1976*
Laboratory Population

29



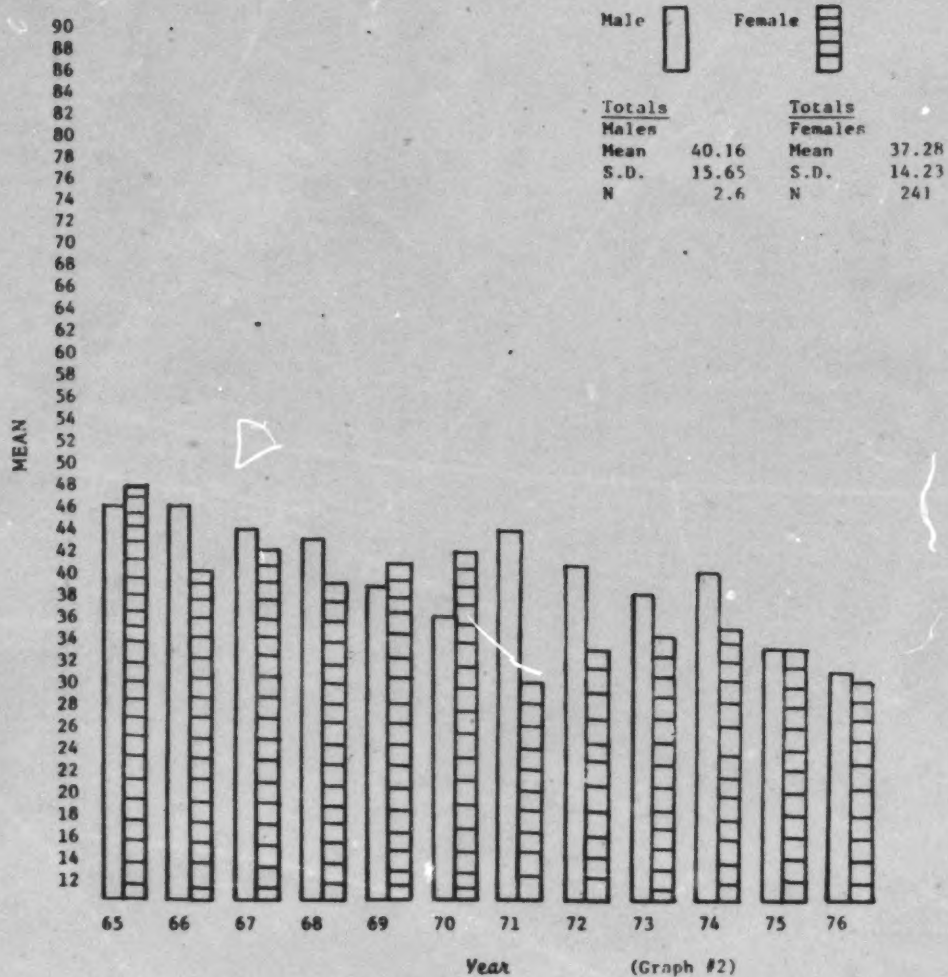
*Means for graph rounded off to nearest whole number

Laboratory Summary Table: WITS-Verbal I 9th Grade

Year	N	Mean	S.D.	Year	N	Mean	S.D.
1965	29	46.79	12.80	1971	39	38.03	15.44
1966	39	43.54	16.88	1972	45	37.04	17.20
1967	38	43.11	14.46	1973	37	35.79	16.03
1968	35	40.54	12.37	1974	41	37.49	12.53
1969	36	40.28	12.02	1975	39	32.95	14.90
1970	45	38.91	16.06	1976	34	30.41	11.82

WITS-Verbal 1-9th Grade
1965-1976*
Laboratory Population

30



*Means for graph rounded off to nearest whole number

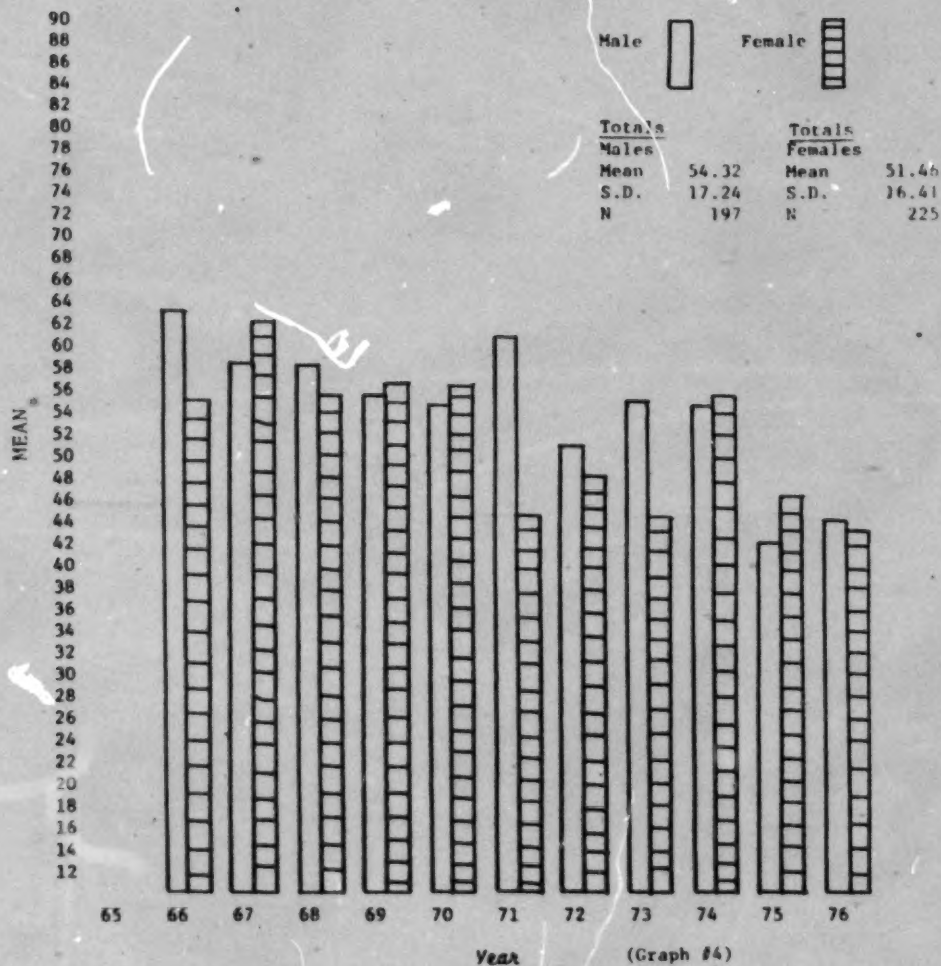
Laboratory Summary Table: WITS-Verbal I 9th Grade (Male-Female)

Year	M N	M Mean	M S.D.	F N	F Mean	F S.D.	Year	M N	M Mean	M S.D.	F N	F Mean	F S.D.
1965	16	45.50	11.67	13	48.38	14.38	1971	22	44.41	16.11	17	29.76	9.84
1966	20	46.45	18.29	19	40.47	15.14	1972	24	40.58	18.08	21	33.00	15.58
1967	17	43.94	16.58	21	42.43	12.87	1973	17	38.22	18.21	20	33.60	13.88
1968	14	43.36	11.37	21	38.67	12.92	1974	19	39.95	13.12	22	35.36	11.90
1969	12	39.42	12.88	24	40.71	11.83	1975	17	32.53	12.91	22	33.27	16.57
1970	22	35.86	13.13	23	41.83	18.24	1976	16	30.63	15.63	18	30.22	7.44

WITS-Verbal I-11th Grade
1965-1976*

Laboratory Population

31



*Means for graph rounded off to nearest whole number.

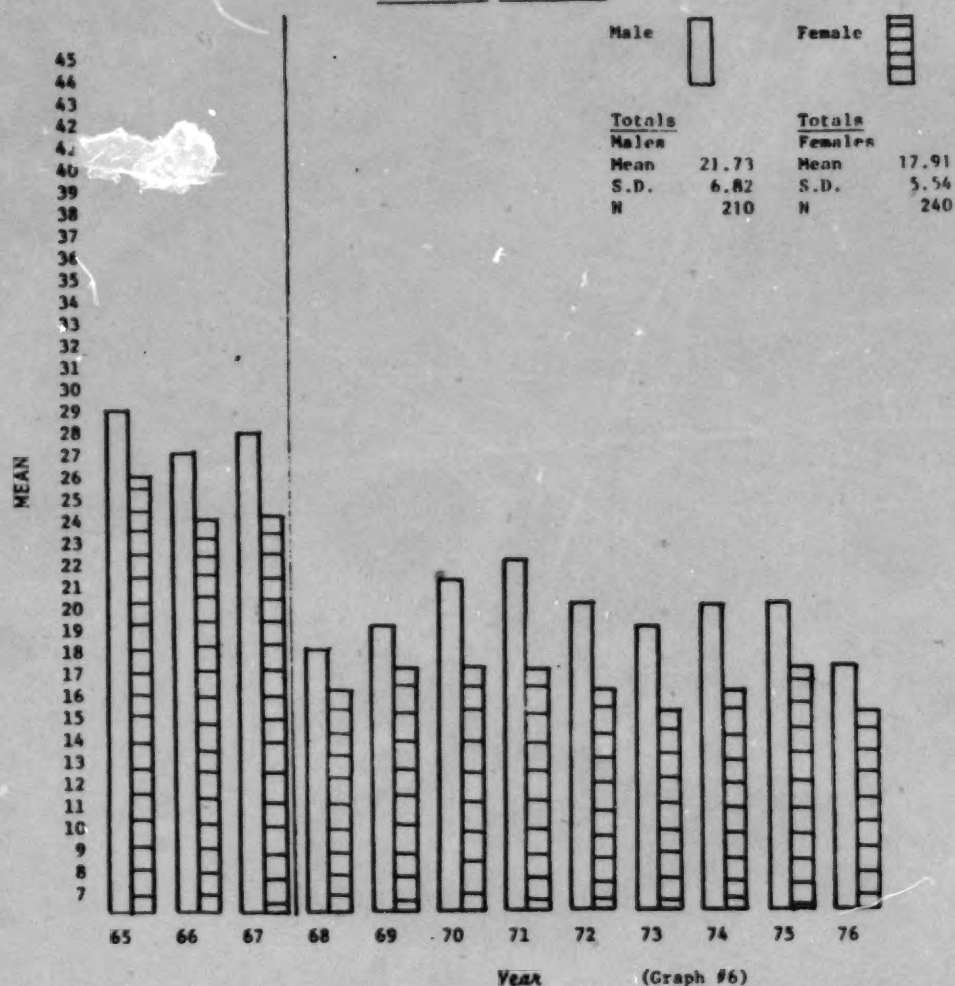
Laboratory Summary Table: WITS-Verbal I 11th Grade (Male-Female)

Year	M	H	H	F	F	F	Year	M	H	H	F	F	F
	N	Mean	S.D.	N	Mean	S.D.		N	Mean	S.D.	N	Mean	S.D.
1965	*	*	*	*	*	*	1971	21	60.33	17.52	17	44.76	11.91
1966	20	62.70	15.08	19	54.95	16.07	1972	21	51.38	20.92	22	47.59	17.23
1967	17	58.47	16.02	21	61.90	16.25	1973	17	55.17	17.43	18	43.61	13.60
1968	15	58.47	13.48	21	55.10	16.61	1974	18	53.67	16.04	22	54.50	17.67
1969	13	55.00	18.31	24	56.33	12.60	1975	16	42.19	13.44	22	44.50	17.65
1970	21	53.71	16.67	22	55.91	16.06	1976	18	44.22	14.23	17	42.65	7.44

*Not Given

WITS-Quantitative II-9th Grade
1965-1976*
Laboratory Population

32



*Means for graph rounded off to nearest whole number

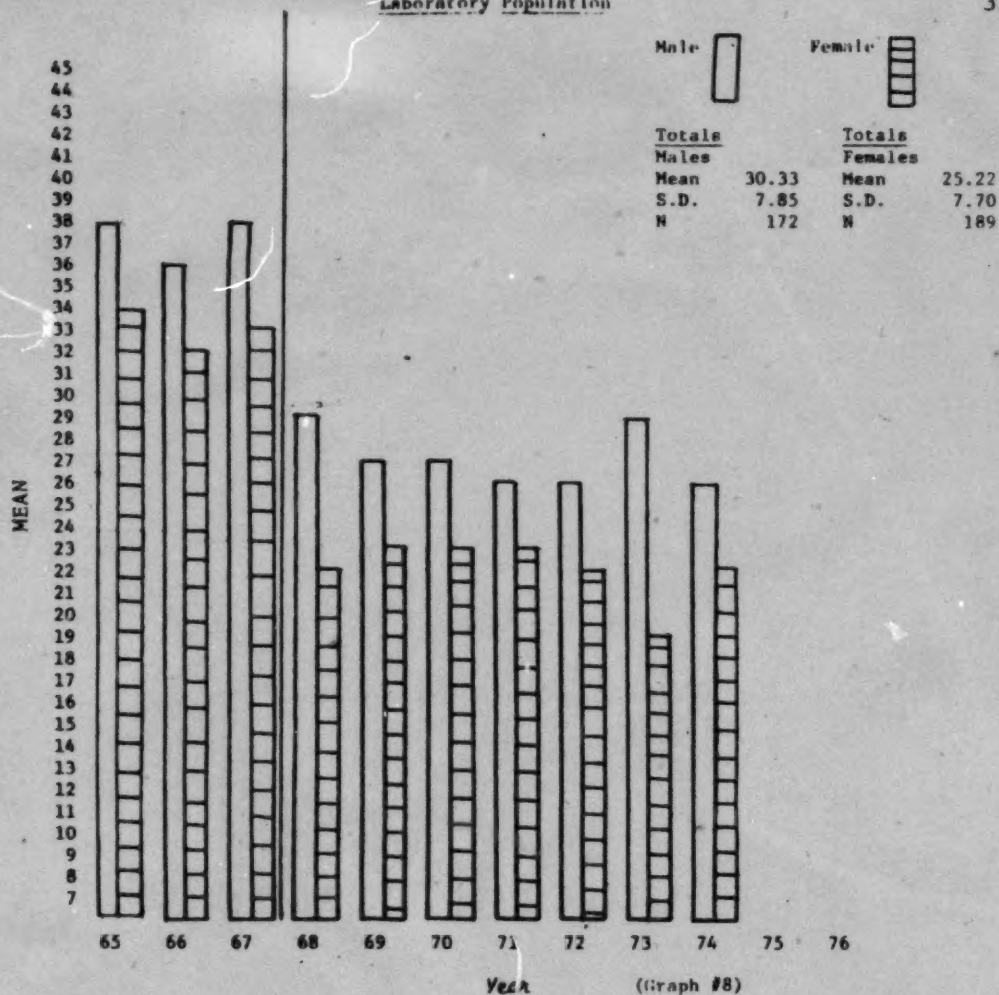
Laboratory Summary Table: WITS-Quantitative II 9th Grade (Male-Female)

Year	N	Mean	S.D.	N	Mean	S.D.	Year	N	Mean	S.D.	N	Mean	S.D.
1965	16	29.13	5.32	13	26.15	2.41	1971	21	21.67	5.03	17	16.71	4.34
1966	20	27.20	5.88	19	24.05	6.05	1972	24	19.58	5.51	21	15.76	5.25
1967	17	28.29	5.23	21	23.67	5.36	1973	18	19.44	6.58	18	15.22	2.10
1968	14	17.57	5.93	22	16.05	2.69	1974	19	19.68	6.74	23	15.57	4.62
1969	12	18.83	6.18	24	16.67	4.00	1975	14	20.43	4.40	22	16.82	4.10
1970	22	20.59	5.75	23	16.52	5.27	1976	13	16.62	5.81	17	15.18	2.96

WITS-Quantitative II-11th Grade
1965-1974*

Laboratory Population

33



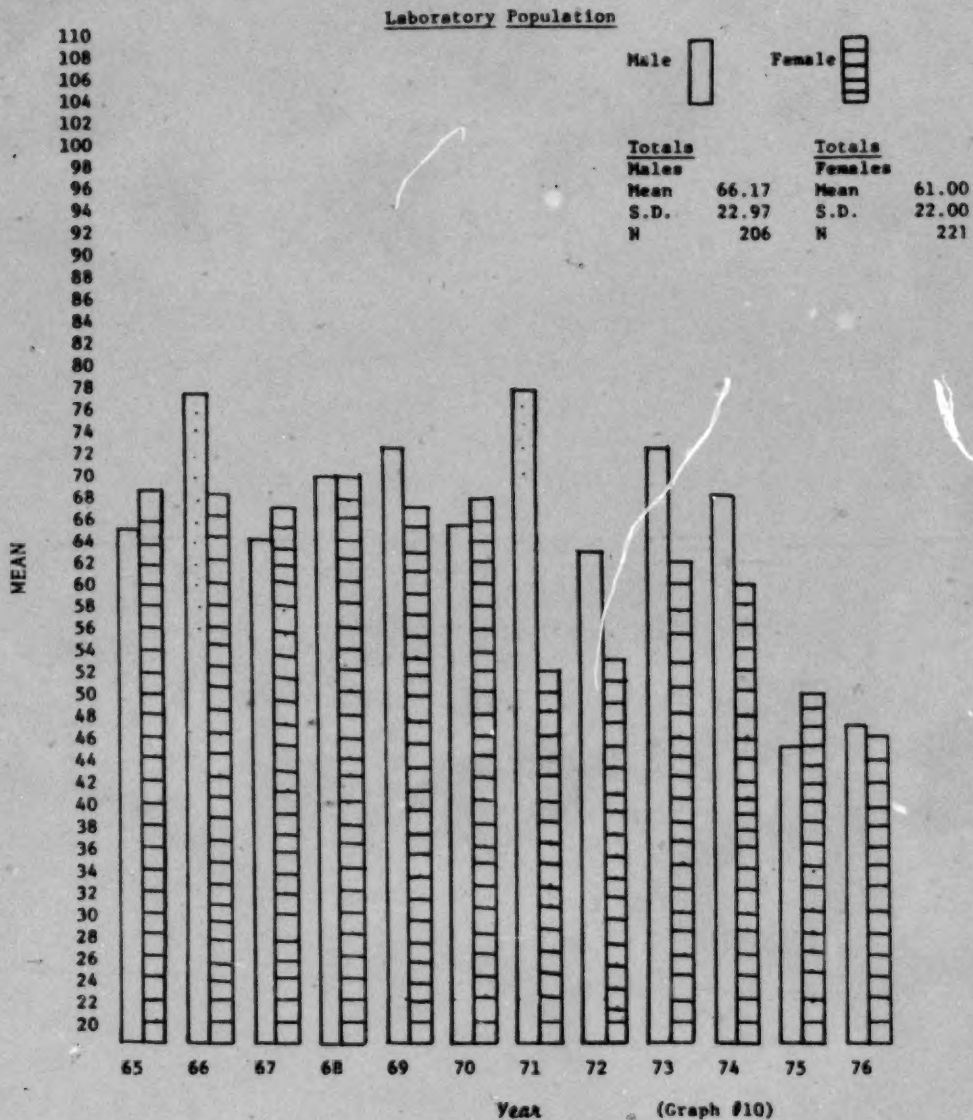
*Means for graph rounded off to nearest whole number

Laboratory Summary Table: WITS-Quantitative II 11th Grade (Male-Female)

Year	M	M		M		F	F	F		M	M		M		F	F	F
	N	Mean		S.D.		N	Mean	S.D.		N	Mean		S.D.		N	Mean	S.D.
1965	15	38.40		4.75		13	33.54	6.91		1971	21	26.29	4.86		17	22.59	4.87
1966	20	36.00		6.81		19	32.47	7.34		1972	21	26.81	7.89		22	22.36	6.72
1967	18	37.50		5.89		21	32.52	6.71		1973	16	28.94	6.68		19	18.89	5.51
1968	15	28.87		6.64		21	22.10	4.78		1974	12	25.75	6.17		11	22.27	5.27
1969	13	27.38		6.13		24	23.33	5.39		1975	New Quantitative						
1970	21	27.19		7.44		22	22.95	6.95		1976	New Quantitative						

Terman Concept Mastery Test--1965-1976*

34



*Means for graph rounded off to nearest whole number

Laboratory Summary Table: Terman Concept Mastery - 12th Grade (Male-Female)

Year	N	Mean	S.D.	N	Mean	S.D.	Year	N	Mean	S.D.	N	Mean	S.D.
1965	16	64.81	19.73	13	68.77	27.27	1971	22	76.55	23.58	17	52.06	20.29
1966	18	76.94	23.75	18	67.61	22.79	1972	23	63.35	26.57	20	52.95	20.34
1967	16	64.19	17.26	20	67.35	25.82	1973	16	71.75	27.25	17	62.29	16.70
1968	14	70.36	15.14	17	69.59	15.63	1974	20	68.32	25.03	20	60.25	23.33
1969	13	72.31	16.93	23	66.87	17.00	1975	18	45.17	16.34	22	49.90	20.34
1970	20	64.90	18.39	21	68.10	26.29	1976	10	46.60	19.27	13	45.54	12.02

NEW QUANTITATIVE
(9th-11th 1973-1976)

Table of Summary Data:

Total Lab Data for New Quantitative

TEST	Lab N	Lab Mean	Lab S.D.
New Quantitative-9th	125	15.02	5.14
New Quantitative-11th	119	23.09	6.67

9th Grade-Verbal

36

Percentile Values for the Wisconsin Inventory for Talented Students-Verbal I, based on the raw scores made by 236 ninth-grade students during the school year, 1971-1976. 100-item test.

<u>Raw Scores</u>	<u>Percentile Values</u>	<u>Raw Scores</u>	<u>Percentile Values</u>	<u>Raw Scores</u>	<u>Percentile Values</u>
74 & above	99	52	85	30	38
73	98	51	84	29	35
72	98	50	82	28	33
71	98	49	81	27	31
70	98	48	80	26	29
69	97	47	78	25	27
68	97	46	78	24	25
67	97	45	77	23	23
66	96	44	75	22	20
65	96	43	73	21	17
64	96	42	72	20	14
63	95	41	70	19	12
62	95	40	68	18	9
61	94	39	66	17	7
60	93	38	64	16	5
59	92	37	63	15	4
58	91	36	60	14	3
57	90	35	57	13	2
56	88	34	53	12	2
55	88	33	49	11	2
54	86	32	46	10 & below	1
53	85	31	42		

Total Number	236
Mean Score	35
S.D.	15
Median Score	33
Mode Score	34

11th Grade Verbal (Repeat)

Percentile Values for the Wisconsin Inventory for Talented Students-Verbal I, based on the raw scores made by 230 students during the 1971-1976 school year. 100-item test.

<u>Raw Scores</u>	<u>Percentile Values</u>	<u>Raw Scores</u>	<u>Percentile Values</u>	<u>Raw Scores</u>	<u>Percentile Values</u>
90 & above	99	66	82	42	41
89	98	65	81	41	38
88	97	64	79	40	36
87	97	63	78	39	33
86	97	62	76	38	29
85	97	61	75	37	27
84	96	60	74	36	24
83	96	59	72	35	22
82	96	58	71	34	19
81	95	57	70	33	16
80	95	56	69	32	14
79	94	55	67	31	12
78	94	54	66	30	11
77	94	53	65	29	10
76	94	52	63	28	9
75	93	51	60	27	7
74	92	50	57	26	5
73	91	49	55	25	5
72	90	48	53	24	4
71	89	47	51	23	4
70	87	46	49	22	3
69	86	45	46	21	3
68	85	44	45	20	3
67	83	43	43	19	2
				18 & below	1

Total Number 230
Mean Score 49
S.D. 17
Median Score 47
Mode Score 39

**9th Grade-Quantitative
(New Form)**

38

Percentile Values for the New Quantitative based on raw scores made by 125 ninth-grade students during the school years 1973-1976. 40-item test.

<u>Raw Scores</u>	<u>Percentile Values</u>	<u>Raw Scores</u>	<u>Percentile Values</u>
28 & above	99	16	57
27	98	15	49
26	98	14	43
25	98	13	36
24	96	12	28
23	94	11	22
22	91	10	19
21	87	9	14
20	83	8	9
19	79	7	6
18	72	6	4
17	65	5 & below	1

Total Number	125
Mean Score	15
S.D.	5
Median Score	15
Mode Score	16

11th Grade-Quantitative
(New Form)
(Repeat)

Percentile Values for the New Quantitative based on the raw scores made by 119 eleventh-grade students during the 1973-1976 school years. 40-item test.

<u>Raw Scores</u>	<u>Percentile Values</u>	<u>Raw Scores</u>	<u>Percentile Values</u>
38 & above	99	21	41
37	98	20	34
36	98	19	27
35	97	18	23
34	96	17	21
33	94	16	17
32	91	15	13
31	87	14	9
30	82	13	5
29	77	12	5
28	74	11	2
27	71	10	2
26	66	9	2
25	62	8	2
24	58	7	2
23	53	6 & below	1
22	46		
		Total Number	119
		Mean Score	23
		S.D.	7
		Median Score	23
		Mode Score	20

12th Grade-Terman

Percentile Values for the Terman Concept Mastery Test, based on the raw scores made by 226 twelfth-grade students from 1971-1976. 190-item test.

<u>Raw Scores</u>	<u>Percentile Values</u>	<u>Raw Scores</u>	<u>Percentile Values</u>	<u>Raw Scores</u>	<u>Percentile Values</u>
115 & above	99	82	85	49	35
114	98	81	84	48	33
113	98	80	82	47	31
112	98	79	81	46	28
111	97	78	80	45	26
110	97	77	80	44	24
109	97	76	79	43	22
108	96	75	79	42	21
107	96	74	78	41	20
106	96	73	77	40	18
105	96	72	75	39	16
104	95	71	75	38	15
103	94	70	75	37	14
102	94	69	74	36	13
101	93	68	73	35	12
100	93	67	71	34	12
99	93	66	70	33	10
98	93	65	68	32	9
97	93	64	66	31	8
96	92	63	64	30	7
95	92	62	63	29	6
94	91	61	63	28	6
93	91	60	61	27	6
92	91	59	59	26	6
91	91	58	57	25	5
90	90	57	56	24	4
89	90	56	54	23	4
88	89	55	52	22	4
87	89	54	50	21	4
86	89	53	48	20	4
85	88	52	45	19	3
84	87	51	42	18	2
83	86	50	38	17 & below	1

Total Number	226
Mean Score	59
S.D.	24
Median Score	54
Mode Score	50

Case Study

One of the purposes of the Research and Guidance Laboratory has been to collect and interpret longitudinal data. This data has been on individual students over four year and ten year periods. All active schools in the Laboratory have been members for over 10 years.

One of the most useful longitudinal methods of research has been the case study. The Research and Guidance Laboratory has undertaken an intensive approach in the use of this research method as a means of understanding and developing programs for superior students.

One of the important aspects of a case study is richness of sources of information. The case studies done at the Laboratory incorporate the following sources:

1. Four years of written reports based on personal interviews
2. Teacher reports on each student.
3. Material from four personal essays.
4. Four high school questionnaires.
5. Laboratory test data.
6. Follow-up questionnaires after high school graduation: 1 yr., 3 yr., 4 yr., 6 yr., 10 yr.
7. Current personal interviews with the case study subject.

To achieve consistency and quality the following guidelines are used at the Laboratory in writing and evaluating case studies.

Twenty Questions about a Case Study:

The following questions may be used in the evaluation of a case study written by another person or of one you have written. They may also be used as a checklist in deciding whether you have the materials you need and have done enough thinking about them before you begin to write your case study. None of the questions should be answered with only one word. Some statement should be given of how the reader arrived at an answer for each question.

1. Are there any serious omissions in the data? You have to decide what you consider a serious omission.

2. Was more than one method employed in the collection of the data? Obviously if the case report consists of only a series of interviews it will be inadequate, since it cannot provide information about the behavior of the subject when he is not in the presence of the investigator. In a good case study, you expect to find evidence of the use of tests, personal documents, behavior descriptions, interviews, and other techniques employed in the study of persons.

3. Has more than one school of thought been considered in the interpretation of the data? You must be familiar with the many possible interpretations. Most statements in a case study are based on the school of thought espoused by the writer, but in a good study the writer will have suggested other possible interpretations. You will seldom find that this has been done.

4. Are the sources of all data specified? The author of the case study owes his reader a clear description of the sources from which his information was collected, knowledge of when it was obtained, and the technique employed in obtaining it. It is not necessary to be explicit about the source of the information contained in every sentence, but it should always be made clear to the reader whether the data were obtained directly from the subject or from a secondary source.

5. Have independent judgments been made by use of tests, judges, and those who provided behavior descriptions? The emphasis here is on the word independent. There is, of course, some merit in a summary behavior description compiled after the result of discussion of several observers, but it will usually be well to obtain uncontaminated and separate judgments from several individuals who have observed the subject in different situations. These may be pooled later, but a pooling obtained from several independent judgments is likely to present a more valid picture than one judgment made in collaboration.

6. Have reference points for statistics been given? As indicated in previous discussion, numbers without some basis for comparison may be misleading.

7. Has consideration been given to the possibility of deception by the subject? For many reasons, people do not always tell the truth. The need for verification of reports obtained from secondary sources is particularly important, but subjects may deceive an interviewer unless he makes special efforts to check the veracity of statements. Unverified data may lead to faulty interpretations.

8. Is the cultural situation given in enough detail? The reader will have to define the word enough. If he finds insufficient information about the community in which the subject lives, inadequate data about the situations met, or paucity of accounts of experiences encountered, he must answer this question in the negative.

9. Is the description of the family situation presented? Particular attention should be paid to the presentation of information about both parents and the need for a description of the atmosphere of the home, as well as a statement about economic circumstances.

10. Is the developmental story told as far as it is relevant? In some case studies it will be desirable to have a record of events in early childhood; in others that period may be so far removed that the events cannot be recalled with validity. In each case the reader will have to decide whether the record is long enough to indicate the main influence on the subject's development. Every case study does not require an elaborate description of early infancy.

11. Has adequate attention been given to current trends of behavior? In this, the above, and the following question, the reader will consider the danger of stressing one period of a person's life without giving enough attention to the past and, perhaps, the future. Although the developmental trends are most important, it is essential that current behavior and performances be reported and that some attention be given to the subject's aspirations and plans for the period ahead.

12. Are future plans given enough consideration?

13. Are data presented as evidence when predictions are made? The making of predictions is a hazardous procedure, even when the case record seems to be quite complete. If, however, they are attempted, the writer should make very clear the bases on which they were made.

14. Has due care been exercised in the interpretation of the motivation of the subject? Earlier in this volume it was indicated that making interpretations of the subject's behavior is a very difficult undertaking. Has the case writer indicated that full consideration has been given to this matter?

15. Are concrete illustrations of general categories presented? Every category that the writer uses for the classification of his subject should be followed or preceded by specific reports of the behavior on which the categorization was made.

16. Have censorial terms been avoided? If the case study writer makes judgments about the subject and describes him with terms such as poor, careless, irresponsible, bad, or lazy, he is name-calling rather than presenting information about the subject's behavior. If he quotes others who use such terms, he must make it clear that they are quotations.

17. Is the writing good? The judgment here will not be solely in terms of grammatical construction and mechanics of language; the reader will look for continuity and coherence. He will probably judge this best by deciding whether he wanted to continue reading the case study. If it does not hold his interest, the writing is probably not good.

18. Has maximum brevity been sought? The presence of extreme wordiness, unnecessary repetitions, and data for which no reason is given or of which no use is made suggests that the answer to this question would be negative.

19. Does the opening paragraph set the tone for the study? The opening statements must be such that the reader wants to learn more about the subject of the case study.

20. Do you feel that you really know the person when you have finished reading the case study? If the answer to this question is, "No" (and it must always be so in the current knowledge about writing case studies) the reader should think of ways he would secure more information to help in understanding the subject. And if, for example, he says that he would like to interview the person, he should indicate clearly what he thinks an interview will add to real knowledge of the person. It is not enough to answer this question "No." Constructive suggestions should follow.

The following case study is an example of the form and content of case studies generated at the Laboratory.

The Case of John

John is a minister at the _____ Church in _____, Wisconsin. He is characterized by himself and his colleagues as the "intellectual" on the staff. Most philosophical and theological questions are brought to him. He is also the advisor for the youth and university students. He views himself as a teacher and is considering moving close to this position in the next two or three years. What is extremely important to John is maintaining a breath of intellectual and people oriented activities. This is a concern we will see often in his life. He is thinking of getting a Ph.D. in systematic theology.

John sees himself as basically satisfied in his field. He believes he is building himself a solid foundation in theology and counseling. He seems to consistently maintain an awareness of his own commitment to his profession. He is realistic about options and doesn't imply that he must stay with his field of choice because it's too late. He indicates a sense of free choice in remaining a minister. In his own words, "There are no other options I want." John is in a field by deliberate choice and not circumstance.

He is his own critic in his work. He feels most comfortable with intellectual issues. He sees some "defects" for himself in counseling. He feels he has become much more sensitive to his parishners and feels good about his progress in this area.

He describes his interests as "Catholic" and a variety of broad based interests. He reads broadly but tends to be reading several different things at once and often does not complete any one area in detail. His thinking about problems is in a broad perspective. He views himself as a "contextual thinker"--he is interested in how things relate. His interest is in common theme rather than specific compartmentalized ideas. He makes use of imagery. Many of the ways he thinks about the church and other areas is in images. Also, his sermons tend to be combined with poetic images. A use of imagery is something John demonstrated as a child. (As we will see later.) His science background is evidenced in much of his thinking but it has taken on a distinctive quality. He is more interested in the culture of science rather than the gadgets. He is interested in how the scientist goes about his work. He wants to know the data, but also looks for the larger interpretation. This interest in viewing things in a larger and usually more human related perspective is an important point to keep in mind when we discuss John's change from science to the humanities.

In discussing how he goes about doing his tasks, John admits he is not well organized. He tends to put things off and does things at the last minute--a trait from his public school days. As he states "he can be easily interrupted from his work." However, he always does get his job done--again a realization that his abilities are high and that he is confident of meeting challenges.

When talking about career choice in his life, John said, "I can't put my finger on a good sound hard line career choice. I can't recall reasons why I went to that school (____)." However, John feels that he has become much more self-accepting and has formed his own identity. He feels his life has become more deliberate in the sense that he is in control of much of what happens. He states "People don't make rational systematic choices--we have to have a certain amount of spontaneity." While allowing for spontaneity John definitely does not view himself as sitting back and letting things happen to him.

He views himself as happily married. His wife is a former graduate of the Research and Guidance Laboratory. He has thought considerably about how he would raise kids--but at this time they have not decided to begin their own family. John comes across as having a definite thought out value system. He views himself morally in the traditional Christian model where the final criteria is love of thy neighbor. He believes in applying what he teaches. Also, he doesn't perceive any major splits or paradoxes in his moral/value system. Interestingly he is least comfortable with the "very pious people" in the sense of those people who consistently use pious words. He is not comfortable with this style.

In his free time John enjoys activities such as reading, TV (old, violent movies), camping, cross-country skiing, canoeing, solitaire and "straightening things up."

In thinking about his future John states "It's open but fraught with hazards." He is optimistic about the possibilities for himself and the world. He is optimistic as long as people are willing to do something and not believe that things will "just get better." He strongly believes the church has an important role in the future in helping to humanize the environment. He sees himself as actively participating in this as actively offering people a sense of hope and necessity for sharing. He sees his global perspective as offering realistic options and that he is willing to live a life-style that is consummate with his views on life.

The remainder of this study is to get some background on John leading up to what was described about his "present." This case study is based on the following:

1. Two personal interviews
2. Laboratory folder of grades 9-12
3. 1, 2, 3, 4, 5, 6, & 10 year follow-up questionnaires
4. Questionnaire by M.P. Sanborn sent in 1975.

Early Childhood

John remembers himself as being very verbal as a child. He would hear jokes or stories and could remember and pass them on. Sometimes he would hear "dirty" jokes and repeat them for the family not understanding what he was saying. The family used to laugh about this and John did too, not knowing why but enjoying the attention.

He also had a very active imagination at this time--much of this seems to have left him as he entered junior high school. He would make up stories to himself "with connected ideas." He had vivid images of whatever he would make up. Sometimes he would talk himself to sleep. He didn't share these fantasies with others, he realized they were made up and private. There seems to be a more mature form of this same use of imagery in John today when he talks about using images to describe things and use of poetic imagery in his sermons.

His father would animatedly read the Sunday paper to the kids. John loved this. Father also taught John much about nature and appreciation of the environment. John recalls learning much from both his parents. His Mother would take the kids to museums, concerts and numerous other cultural events. This was quite rare in a small town like _____. In recalling his parents through his childhood and later years, he sees that they supported him, and were always most concerned that John do or be whatever he wanted to. They would teach him and give him attention but he remembers being allowed a lot of freedom in his life. When it came time to choose a career or college John recalls that his parents wanted it to be his choice. He remembers his father wanting him to go into chemistry but only if that was what John wanted. John got along very well with his siblings. His parents got along well also, and it was a very stable home environment. Also, he remembers his parents didn't overly praise him for his good grades and academic ability in school. He feels they cared but didn't give too much attention about this. John remembers that sometimes he would want more than was given.

Elementary School

John was always a top student. He was in the top reading groups. He was conscious of competing with others but recognized who the top kids were academically and only compared himself with them.

He remembers himself as being curious. He read science quite a bit. He got interested in music and became part of the junior high school band. He enjoyed going to the junior high school for rehearsals with the older kids.

While in school he never regarded himself as an "egghead" nor does he believe his friends ever did. He would talk out of turn to answer questions. When teachers would ask a question he wouldn't get called on since it was assumed he knew the answer. Sometimes he would answer anyway. He wanted others to realize that he knew his stuff and he remembers some arrogance about his intellectual abilities. He hated to give wrong answers. His favorite subject in those years was science and he remembers having very bad handwriting.

He got along with other kids. His friends were based on neighborhood proximity. There was no distinction in choosing friends on the basis of intelligence. However, this did occur in his late high school years. He disliked being second in anything. Sometimes in sports he would become arrogant having to prove himself. He was not as interested in team sports as he was in individual sports.

Junior High School (7-9)

He already had exposure to the junior high school through band so the transition was not very difficult for him. He enjoyed the variety of changing teachers for each class. He did some reading on his own but it doesn't seem he had to work particularly hard to do well. Projects and assignments were done at the last minute--but successfully.

Socially he was on the boundary of the popular group in grades 7-8 but was not in the inner circle. In 9th grade he was elected President of the Student Council. John remembers himself as being a loner in 9th grade.

John's vivid childhood imagination didn't seem as evident at this time. Sexual fantasies were the predominant part of his imagination during those years.

High School 9-12 (mostly 10-12)

John was very active in high school. Among his activities were President of the Student Council, Debate, National Honor Society, football, swimming, and playing the French Horn in the band. The hobby he most remembers is stamp collecting which he continued through high school and still has as a collection. Most of his reading was for pleasure.

Socially, he had a steady girl. He was not in the inner core of the popularity group. He wanted to be in but only on his terms. He did not care for drinking and refused to succumb to the peer pressures on this issue. He spent most of his time with his girl friend. John remembers tinges of loneliness during these years.

His favorite subjects were science and math. He most favored science--especially chemistry and physics. He remembers the most interesting things were going on in the science classes and that the most stimulating teachers were in science. He particularly recalls an excellent chemistry teacher and credits this role model as a factor in starting his own college career in chemistry. The influence of role models has been important to John throughout his life and seems to have impact in his career thinking.

English, French and history were his least favorite subjects. John recalls that there was no imagination in teaching these classes and consequently he was not enthusiastic about these subjects. In general classes in high school were not challenging and he didn't have to work very hard to do well. His study habits at this time needed little attention.

John recalls his high school years as pretty narrow in terms of thinking about careers or thinking about his own interests. He seems not to have been too aware of some of his budding humanistic interests and did little to explore them at this time. He remembers simply being tracked into science and math because he was always strong in these areas. The guidance department did nothing for him in helping him explore career opportunities other than science. He "decided" to enter chemistry with little thought other than the fact that he was good in this area and chemistry was a status field to enter. Also, since science was most interesting in high school, he assumed it would be the same in college.

In thinking about college, the choices he considered were the U.S. Naval Academy and _____ for chemistry. He chose _____ because he had some exposure to it from the Lab program and it had a good science department.

He received the following scholarships from high school:

Henry Vilas
Cooperative Appointment
National Honor Society

Laboratory Experience

John was selected for the Lab in his 9th grade year. When asked why he was selected for the program he replied because of his good grades, high test scores and that he was active in student activities.

John seemed to be aware of his high intellectual ability. In high school he had a clear sense of being among the more intellectual. This group formed a unique camaraderie and in his words, "We were highly skilled and inventive hell-raisers."

John enjoyed his participation in the Lab. What he most recalls as influential was simply exposure to Madison campus--which helped in his decision to attend _____. Also, the Lab got him to think more about himself. In his senior student report John wrote that the Lab was helpful in presenting many new ideas and helping him form his final decision concerning a career. He did not specify more than this and presently he doesn't remember how the Lab was very instrumental in his career choice.

Some comments made by his 9th grade teachers are telling of how he was viewed:

English/Journalism - very capable. Inclined to procrastinate at times and to rely on the ease and quickness with which he can work.

Social Studies - An excellent, sharp mind. Tremendous potential. Things come almost too easy for John.

Biology - Often becomes interested in things on his own and carries them out to satisfy his own curiosity.

Algebra - A lot of ability going to waste. If John ever finds a purpose in life, he will be a powerhouse.

French - John is a superior student, but seems to come by this without too much effort. He is inclined to be rather "lazy" and content to do what is required of him and stop there. --some type of reply in French which might be difficult--he can be rather "cocky."

Band - His initiative runs about parallel to the interest that he takes in a matter.

Phy. Ed. - He has the problem of not thinking before he acts in many cases.

The Laboratory reports on John seem to be uncanny indicators of things to come. It seems many of the diverse qualities about John were recognized. While it was conceded that John would pursue the fields of chemistry and physics, John did express that he would like to explore other studies and activities such as humanities, particularly literature. The reports indicate that John had an unusually deep sense of personal meaning about his future and that whatever he would do would have to be very meaningful to him.

In the reports it was also stated, that while chemistry was his occupational choice, there were other possibilities that had not been considered thoroughly. His interest in literature, debating, music, and discussing social problems suggested several areas that had not been considered. A line in his senior Lab report is worth quoting, "Clergyman has been suggested by others, but John has discarded the idea."

When asked what effect the Lab had on his career John answered that it may only have helped provide additional support for seeing himself as a superior student and that it acquainted him with a university campus.

From the Lab materials it seems John was increasingly becoming aware of himself in many areas. However, the only exploration he did was in the area of science. His interests in the humanities were showing but, because of his "boredom" with humanities at school and little effort from guidance to think about areas other than science, John did not move beyond the awareness stage. However, it seems that interests were coming out and that in a short time--during his freshman year--other parts of John developed in his career thinking.

College & Seminary

John's study habits had to change when he began college. Because of his fear of a new surrounding he began thinking about having to study. The "radical" change occurred during his first semester. John dropped chemistry as his major. He felt it was too narrow a field and that it wasn't worth putting in all of his time and effort. He had no clear picture of what chemistry would be like after high school. He found that his interests were people oriented and that there seemed to be more interest in subjects he had not considered interesting before. He switched to general humanities and finished with a B.A. in history. It seems that this decision was made from his own evaluation on what he wanted for himself and where his interests were headed. He seemed more interested in broad human contact and began to think about which subjects would get him this contact.

His college career was successful and were "most enjoyable years." He ended with about a 3.94 GPA out of 4.0. He was active in organizations and honor societies such as Phi Eta Sigma, Phi Kappa Phi, Phi Beta Kappa, and Iron Cross. His other activities were in religion organizations, intramural sports, and service organizations.

John's college years seem to depict a rapidly expanding interest in people and intellectual pursuit of humanities. This interest in humanities and intellectual pursuit prompted John to attend the _____ School of Theology at _____ upon college graduation. He indicated that theology offered a broad human perspective. To satisfy his intellectual desires, he entered with the

intention of eventually teaching theology.

In the seminary two very important things happened. John found that there was a split between intellectuals (he counted himself in this group) and those that were "people oriented." It seemed that the atmosphere dictated that you couldn't care about people and work with people and pursue an intellectual career at the same time. During his seminary internship he was supervised by a minister who exemplified the combination of intellect and service. This standout model helped John bring together what he wanted in a life's work--intellectual pursuit and service to people. It seems that this experience more than any other single experience helped John choose the ministry as a vocation that would satisfy his own desires and hopes.

Present Thoughts on Career

When speaking about his life's vocation he states, "My work is extremely satisfying, challenging and provides the opportunity for continuing learning and development." Since high school John has been increasingly aware of his own high intellectual curiosity and broad interests. His thoughts politically and socially have evolved from more traditional to as he calls it "the left."

For John, the road to career has changed several times. In 8th grade he wanted to be a Forest Ranger, in high school a chemist with some thoughts of being a musician. Towards the end of college he decided to pursue theology. In recalling high school John states, "My education in the humanities was dismal. I missed (upon reflection) the most imaginative teachers in history and literature." On memories of high school counseling, other than the trips to Madison; John stated, "I don't think there was any significant official counseling."

In reflecting about career development John writes, "I think, at any rate, that the most significant factor for me has been encounters with personal models of involved lives--people who have exhibited both intellectual and personal--ethical commitments in integrated and sustaining and joyful life patterns."

When talking about his vocation as a minister, he definitely sees it as a way of life and not an occupational role. He has much of his life vested in the ministry. As he says, about the ministry, "It is a dimension of my self-identity, though not the sole shaper of my identity. I feel that I have been able to shape my career to fit my personal life-style." It appears that the style of life is most important to John.

John presently thinks much about his career. While he feels satisfied, he is thinking of how to improve himself and about further schooling in theology, perhaps to eventually do some teaching in the field.

Test Summary:

In Laboratory program from 1960-1963

TEST

School & College Ability Test	Form	Grade	Percentile	Norms
Verbal	2A	9	96-99+	9th Graders
Quantitative			99+	
Total			99+	
<u>Differential Aptitude Test</u>				
Abstract Reasoning				
Verbal Reasoning		10	97	10th Boys
Numerical Ability				
<u>Davis Reading Test</u>				
Level of Comprehension	1A	10	96	11th Graders
Speed of Comprehension	1A	10	97	11th Graders
Watson-Glaser Critical Thinking	AM	11	99+	High School
STEP Science	2A	9	98-99+	9th Graders
Terman Concept Mastery	T	12	Raw Score 100	Lab Average 60-69
WITS-Quantitative			43 Correct of 50	Norms Not Available

Outreach

Staff members of the Research and Guidance Laboratory are constantly sharing information that they learn through their work with gifted and talented students. A portion of this sharing is accomplished through professional journals and books. A significant amount of sharing, however, occurs through other forms of "outreach," namely through presentation of papers, involvement in federal or state funded projects, and conduction of workshops.

An annotation of a number of these efforts follows:

Papers:

I. Sanborn, Marshall P. Barriers for actions. Written for the National Conference on the Culturally Different Gifted Child sponsored by the Foundation for Exceptional Children, Raleigh, North Carolina, 1974.

Focus

This paper proposes seven key "Barriers to Action" which are relevant to the problem of identification and education of "gifted" students. The barriers are

- 1) We tend to utilize inadequate and inappropriate procedures for identification of the "gifted."
- 2) We harbor inappropriate attitudes about what learning is and what learning is needed by "gifted" students.
- 3) We persist with the mistaken notion that provision of adequate experiences for the gifted requires additional expenditures of money.

- 4) In schools, we are too often unwilling to take risks.
- 5) Although we pay lip service to the concept of individual differences we act as if we believe all persons should be treated alike.
- 6) Adequate individualization of educational experiences for "gifted" children is administratively inconvenient.
- 7) Many procedures which would be appropriate for "gifted" pupils are not sanctioned by the school or by the public.

Suggestions are made by the author for overcoming the barriers that exist. These suggestions are based on clearly specified observational techniques for identification of the gifted and on ideas for the development of adequate programs and procedures for educating gifted children.

II. Sanborn, Marshall P. A statewide program in the discovery and guidance of gifted students. Presented at a symposium for exceptional children, Johns Hopkins University, Maryland, 1975.

Focus

This paper discusses the historical foundations for the Research and Guidance Laboratory, highlights the goals and procedures used, discusses means for identifying gifted and talented students, and concentrates on the significant body of research that has emerged during the Laboratory's eighteen year history. Specific emphasis is placed on knowledge gained about Laboratory students, procedures used in working with students' parents, means for stimulating change in participating schools, and discussion of the Laboratory impact on students.

III. Pulvino, Charles J. Identification and programming of superior students. Presented at the annual Conference for Exceptional and Gifted Children in New York, 1974.

Focus

This paper suggests that multipotential youth have unique needs, desires, aptitudes, and competencies and that programs designed for their benefit must stress identification of talent and development of procedures which will enhance students' educational-personal growth. The Research and Guidance Laboratory provides the base for discussion of program development which will enhance educational experiences of gifted and talented students, provide services to teachers, parents, and school administrators interested in meeting the needs of involved students, and improve evaluation of multipotential programs. Emphasis is placed upon establishment of adequate identification procedures and a more total use of evaluation and research findings in program development and implementation.

IV. Zaffrann, Ronald T. Counseling and guidance provisions in schools for gifted and talented youth. Action paper for American Personnel & Guidance Association Government Relations Committee, Task Force on Professional Issues and Needs, Fall, 1975.

Focus

Through this proposal, the need for special counseling and guidance provisions for gifted and talented students is established. An historical perspective is offered and the central issue is described. Various roles of school counselors working with gifted students are discussed. Supportive

data are provided. Recommended positions for APGA--on counselor training, counselor involvement in the schools, and counselor involvement at the State level--are offered.

Projects:

I. Sanborn, Marshall P., & Pulvino, Charles J. Developing a model program for identification, guidance and education of gifted and talented educationally disadvantaged students in Wisconsin schools. Submitted to Department of Public Instruction, State of Wisconsin, 1971.

Purpose

The purpose of this project was to carry on a longitudinal research and demonstration program in the discovery and guidance of minority youth who showed superior promise in any educational area. Specific objectives were as follows:

1. To develop and demonstrate adequate methods for identifying Negro and American Indian Youth who possess strong educational potential at the time they enter high school.
2. To develop and demonstrate longitudinal counseling and guidance procedures aimed at improving educational-vocational experiences and objectives of those youth.
3. To assist schools in improving opportunities and incentives for higher educational-vocational attainment of those youth.
4. To improve articulation of high school and college experiences for the students.
5. To recruit and train school counselors with more adequate knowledge and skill for working with potentially able students, their parents, and teachers in educationally disadvantaged situations.

Results

The project was funded for one year. Progress was made toward achievement of the five objectives stated above. Two schools with a significant Native American population participated, liason committees were formed in the schools, meetings with students, teachers, home-school coordinators, administrators, and parents were held. Programming suggestions were offered to the involved schools. Unfortunately a lack of funding for the second year prevented any long term follow through.

II. Pulvino, Charles J.; Piechowski, Michael M.; & Zaffrann, Ronald T. Second National Conference of Gifted and Talented Students and Catalog of Ideas and Available Resources for the Gifted. Submitted to Health, Education and Welfare, Washington, D.C., 1974.

Purpose

- 1) To assemble a Catalog of programs, ideas, projects, and experiences representative of educational provision for gifted individuals and groups around the country.
- 2) To further examine the needs and concerns of the gifted and talented.
- 3) To examine existing criteria for the identification of the gifted.

Results

Partial, but insufficient funding was awarded. The project, therefore, was not formally begun.

III. Sanborn, Marshall P.; Pulvino, Charles J.; Wolleat, Patricia L.; and Perrone, Philip A. Career education of gifted and talented boys and girls. Federally assisted nonconstruction program (OMB No. 80-R0186), 1976.

Purpose

Within the Laboratory program it has been possible to carry out research in local school settings on the usefulness of a variety of procedures for meeting career education needs of gifted and talented students. Ten year post-high school follow-up data regarding career development of young people who were administered the procedure is available. It was proposed to develop and implement a demonstration program designed to show teachers, administrators, counselors, parents of gifted and talented children, and community resource persons what procedures could be utilized and how they can be introduced into their schools. The primary objective was to promote more widespread use of career education techniques addressed to the problems of the gifted and talented, and to pay more adequate attention to special problems of gifted and talented girls. The project was aimed at:

- a. Adoption of specialized procedures to augment career education of gifted and talented boys and girls in more local school systems throughout the country.
- b. Adaptation of procedures so as to render them feasible to school communities of varying size, staff characteristics, facilities, and resources.
- c. More frequent and more adequate cooperation between school and non-school resources in articulating total career education programs.
- d. On-going evaluation and improvement of local career education practices.

Results

Materials were developed from longitudinal information available in the Research and Guidance Laboratory and interfaced with the Wisconsin Career Education Planning Model. Presentation of materials by Laboratory representatives occurred in the following locales:

Seattle, Washington
 Alamosa, Colorado
 Carbondale, Illinois
 Amherst, Massachusetts
 Carrollton, Alabama

Workshops:

I. Pulvino, Charles J. Career education of the gifted and talented. Presented for the Board of Cooperative Educational Services in Belmont, New York, 1976.

Purpose

To introduce secondary school teachers to the special needs of gifted and talented students and to expose them to the Wisconsin Career Education Planning Model (WCEPM) and the application of principles contained therein in their classrooms. Primary materials used were Research and Guidance Laboratory longitudinal case studies, procedural materials developed through the Laboratory, and the WCEPM. Approximately forty teachers participated in this one-day workshop.

II. Colangelo, Nick, & Zaffrann, Ron. Counseling the gifted students. Wisconsin Council for Gifted and Talented, Stevens Point, Wisconsin, October 24-25, 1975.

Purpose

To present rationale and activities for counseling with gifted and talented students. Workshop aimed at school counselors in areas of counseling, consulting and evaluation.

III. Colangelo, Nick, & Zaffrann, Ron. Special education: Meeting the needs and concerns of gifted. Tenth Annual Special Education Conference, Oshkosh, Wisconsin, February 13-14, 1976.

Purpose

To offer a rationale and program for including gifted and talented students among those with special educational needs. Workshop aimed at school personnel--teachers, counselors, administrators--as well as teacher educators. Resources based upon programs and activities of the Research and Guidance Laboratory.

IV. Zaffrann, Ron, & Colangelo, Nick. Consulting with parents, teachers and administrators for gifted students. Regional Conference on Consultation for School Personnel, Milton, Wisconsin, February 21, 1976.

Purpose

To present a consultation model for use by school teachers, counselors, administrators and parents working with gifted and talented students. Materials based on model drawn up by presenters and included in the Laboratory monograph, Counseling the Gifted Student.

Directions for the Future

Many ideas have been investigated in the nineteen years of Laboratory existence. Research is, and will continue to be, an important undertaking of staff members. At present emphasis is being placed on development of longitudinal case studies of approximately thirty students that graduated from high school a decade ago. Thirteen of these studies have been completed using the Wisconsin Career Education Planning Model as a guide. The remaining studies are focusing on students from a social-personal-educational perspective.

Among other things, these in-depth studies should provide useful information about how selected gifted and talented students think, what they see as important in their development, ideas about scholastic programming needs, and clues as to more appropriate counseling and teaching interventions. The Laboratory will continue to perform longitudinal research through case studies and long term follow-up studies. In addition, research is being initiated to explore more appropriate identification procedures of gifted and talented students, the importance of convergent-divergent thought processes, hemispheric specialization as manifested in the gifted and talented, the need for additional emphasis on psychological education with the gifted and talented, and in-depth analysis of materials participating students have completed.

SECTION III

Counseling and Guidance Provisions

As part of the Department of Counseling and Guidance at the University of Wisconsin-Madison, a major focus of the Laboratory is in the area of counseling and guidance. In this section, several facets of providing counseling and guidance programs and services for gifted and talented students in Wisconsin schools are presented and discussed:

1. Identification and selection of gifted and talented students in participating Laboratory schools.
2. Counseling the gifted student.
3. Career development for gifted and talented students.
4. Curriculum planning for gifted students.

Identifying the Superior Student

Traditionally identification of gifted students has been accomplished by administering standardized tests, setting arbitrary cut-off points, and declaring that those students whose scores fall above a certain point were superior, talented, gifted or even genius. The use of this procedure fails to give consideration to the fact that "giftedness" can be exhibited in other ways. Also, tests provide only relatively short and limited samples

of achievement in highly structured situations rather than encompassing the multipotential aspect of gifted and talented. In many instances multipotential students can academically accomplish more, more quickly than their peers. They frequently have varied interests and competencies, demand a high degree of independence, are interested in self-discovery and self-understanding, and view a career as a means of self-expression rather than as an end in itself. At the same time, multipotential students can expect that others will be more demanding of their productivity than that of "normal" peers, that their formalized educational experiences will extend beyond the norm thereby incurring all the difficulties of being a dependent person, that choice decisions will be more difficult because of the numerous possibilities that exist, and that traditional educational experiences will be geared toward average students and not toward multipotential students' needs or abilities.

From the inception of the Research and Guidance Laboratory for Superior Students, one central problem has continuously been noted; how does one identify a gifted student. Continuous efforts have been made to resolve this question. Presently the Laboratory is making extensive use of teachers in identifying superior students. Some educators believe that teacher judgments are inadequate to identify superior students; however a considerable amount of evidence indicates that if teachers are given instructions about what to look for and are provided some caution about avoiding common errors, can perform the task very effectively. No procedure is perfect, and some

good students are likely to be overlooked under any system; but a procedure such as the one outlined below has the merit of looking at students from numerous perspectives.

At present the method used for identifying student participants in the Laboratory program is as follows: Participating schools are asked to develop a committee of interested teachers, counselors and administrators for identifying potential participants. In some instances, schools include parents and/or students on the selection committee. The Laboratory provides the committee with general guidelines for identifying multipotential youth. At present suggested guidelines are aimed at those students that: (See Sanborn, Pulvino, & Wunderlin, 1971)

1. Use large vocabulary easily and accurately
2. Are effective in spoken and written communication
3. Have a rich reading background, and show evidence that they think about reading and like to discuss it
4. Show a wide range of interests, or in exceptional cases a heavy concentration on one
5. Spend time beyond usual assignments or schedules on things that interest them
6. Spend much time on special projects of their own
7. Perform significantly above grade level in school subjects
8. Usually receive good marks in school classes
9. Tend to figure out what is wrong with an activity and show how it can be done better

10. Give refreshing twists to even old ideas
11. Show little patience with routine procedures and skills
12. Ask penetrating questions, particularly about causes and reasons
13. Like to seek answers to problems and puzzles
14. Are quick to recognize relationships

Committee members are reminded that multipotential youth may not necessarily meet all the preceding criteria, but that they will usually meet some combination of them.

In addition to the above the following sources of identification have been outlined by Thomas and Crescimbeni (1966).

1. Individual Intelligence tests
2. Group Intelligence tests
3. Standardized Achievement tests
4. Tests of Creativity
5. Aptitude Tests
6. Reading Tests
7. Prognostic Tests--Reading Readiness, etc.
8. Special Aptitude Tests
9. Interest Inventories
10. Personality Tests
11. Teacher Ratings

12. Progress Charts
13. Peer Observations
14. Parental Observations
15. Observations of Community Leaders
16. Work Samples

All too frequently students identified as being gifted are those that have high motivational characteristics and/or personality variables which make them "nice to have in class." Application of Laboratory criteria or those included in the Thomas and Crescimbeni list continue to have the shortcoming that they must be filtered through the perception of committee members. It remains that any system of criterion, whether subjective or objective in nature, will be subjective when subjectively applied.

Possibilities for the Future:

Identification of superior students continues to be a challenging and integral part of the Laboratory. On-going seminars for Laboratory assistants are concerned with aspects of gifted students, including identification. Work on longitudinal case study data may reveal important information for the development of identification criteria. Work will also concentrate on developing systematic criteria for identification of gifted minorities and disadvantaged as well as programs suited for the needs of these groups.

Piechowski (1974) is continuing work on a facet of Dabrowski's (1964) theory of positive disintegration which deals with an individual's development potential. Developmental potential is characterized as being "the

original endowment which determines the character and extent of mental growth possible for any given individual" (Piechowski, 1974, p. 90) and can be evidenced by five dimensions of mental functioning:

1. Psychomotor - motor energy, agitation, a need for action
2. Sensual - surface interaction through sensory inputs of pleasure and displeasure
3. Intellectual - Analysis, Questioning, and Logic
4. Imaginational - Dreams, Images, Humor, Strong Visualization of Experience
5. Emotional - Relationships with others, Despair of Loneliness, Joy of Love, or Enigma of Existence

The presence and intensity of these dimensions in an individual may be indicators and measures of high potentiality.

Counseling the Gifted Student¹

A few preliminary words about the following. This section

1. is aimed at the unique counseling & guidance concerned of gifted and talented students in the following areas:
 - a. personal-social concerns
 - b. educational concerns
 - c. career-vocational concerns
2. is a PRACTICAL guide to counseling & guidance provisions for gifted students within a general guidance department framework.

¹

Taken from Counseling the Gifted Student, by Nick Colangelo and Ron Zaffrann, Research and Guidance Laboratory, University of Wisconsin-Madison, 1975.

3. serves as a complement to an oral presentation. The presentation follows the enclosed outline and incorporates the following sections:

Overview:

I. Counseling with Students.

A. Personal-social concerns

Personal essays can be used as an effective counseling tool by soliciting students' comments, values and feelings about topics such as self-awareness, responsibility, family, peers, and personal direction.

1. Essay topics See Page 72.

Personal writings can be examined by counselors and discussed with students according to several different topics or areas.

2. Reading essays See Page 74.

B. Educational concerns

Just as important as which tests are selected for gifted students are how those tests are used and interpreted and for what purposes.

1. On testing See Page 75.

Since many gifted students have progressed through school on reputation and skillful knowledge of the "academic system," they often need assistance in basic study skills and direction and focus in reading.

2. Reading List See Page 76.

C. Career-vocational concerns

Gifted students encounter unique career-vocational concerns; a) expectations of significant others may not coincide with their own goals and needs; b) their "multipotentiality" makes specific career decisions frustrating and difficult; c) the long training periods for professional careers which most gifted students choose demand serious commitments in time and finances; d) gifted women may need to re-examine the notion

of marriage and career being mutually exclusive entities. The Wisconsin Career Development Model aims at a consideration of these issues as well as a focus on life-style education and development.

1. Career development model See Page 77.

II. Consulting with Teachers

One valuable topic for consultation with teachers about gifted students is that of specialized curriculum programs, designed for both individuals and groups. Independent study programs, emphasizing the process of learning as well as the final products, can focus on several important goals, e.g., self-direction, personal management of time and work schedule, cooperation with faculty and peers, use of imagination, opportunity to teach others.

- A. Independent study contract See Page 80.

- B. In-service: Individualized
 & group programs See Page 81.

III. Consulting with Administrators

Counselors and administrators can form an effective consultation team in areas such as identification and selection of gifted students, provision of special programs within the school, and administrative support for students and staff through programs and allocated resources.

- A. Provisions for gifted students See Page 82.

IV. Consulting with Parents

School counselors can help develop awareness and support of gifted needs and concerns by stressing education and involvement of parents through conferences and special parent groups.

- A. Awareness/Involvement/Education
 of Parents See Page 84.

- B. Parent groups See Page 85.

V. Research and Evaluation

Counselors need to participate in at least two areas of action research: 1) investigations focused upon gifted students themselves, e.g., follow-ups; essay analysis; and 2) evaluation of and changes in the gifted program itself.

- A. Follow-ups See Page 86.
- B. Evaluation of gifted program See Page 87.
- C. Ten questions for initiating
counseling & guidance
programs for gifted students See Page 88.

Suggested Personal Topics for Use by School Counselors
with Gifted Students

72

I. Structured

Topic 1 "The Dominant Influences that have Affected My Life." Perhaps it would be helpful if you keep in mind the following questions as you write:

1. In what ways have certain persons influenced my life most?
2. What social factors have an important affect on my personal life?
3. What other factors have caused me to be the person I am?
4. How will the above factors aid or hinder me in attaining what I hope to become?

2 "My Own Responsibilities in My Present Life." Perhaps it would be helpful to keep the following questions in mind while you write:

1. In what ways do you influence other persons?
2. What influence do you have on your school, home, community?
3. What conditions or factors do you know about that you would like to change if you could?
4. What personal characteristics do you possess which help or hinder you in your efforts to affect other persons or conditions?

3 "The Changing Influences that are Effecting My Life." Perhaps it would be helpful if you keep the following questions in mind while you write:

1. In what ways are certain persons influencing my present life?
2. How are present social factors having an important effect in my life?
3. What factors are causing change in my life?
4. How are the above helping or hindering me in attaining what I hope to become?

4 "The Future as I See It and My Place in the Future." Perhaps it would help if you keep the following questions in mind while you write:

1. What conditions or social factors do you foresee that you will want to affect?
2. In what ways do you intend to influence other persons?
3. What influence do you hope to have on your society?
4. What personal characteristics do you believe you have which will help or hinder you in achieving the above goals?

II. Unstructured

The things I do,
The feelings I have,
The thoughts that run through my mind.

III. Open-Ended Statements*

1. When I get a low test grade I
2. When I get a high test grade I
3. I am most proud of my achievements in the following areas
4. I am least proud of my lack of achievements in the following areas
5. The others students in this class are
6. When I do my homework, I
7. When I miss my school assignments, I
8. I plan a career in
9. My parents are proud of me when
10. I am interested in learning when my teacher
11. I am not interested in learning when my teacher
12. I am attentive when my teacher
13. I am inattentive when my teacher

Dr. M. J. Wittek is Professor of Education, York College, Jamaica, N.Y.

*adapted from M. J. Wittek, Professor of Education, Your College, Jamaica, N.Y.

IV. Direct Exploration Questions

1. If we were to ask your closest friends what kind of person you are, how do you think they might describe you?
2. How would you describe yourself?
3. What do you do when there is nothing that you have to do?
4. If you had just one wish, what would it be?

CHECKLIST FOR READING PERSONAL ESSAYS

74

- I. Perceptions/Attitudes Toward:
 1. Self
 2. Parents
 3. Siblings
 4. School/School Personnel
 5. Friends/Peers
- II. Sense of Personal Development:
 1. Intellectual
 2. Emotional
 3. Moral/Values
- III. Locus of Control--Internal vs. External Locus of Control
- IV. Sense of Personal Direction
 1. Life-Style
 2. Career/Education
- V. Sense of Conformity vs. Rebellion Towards Societal Norms
- VI. Sense of Pessimism vs. Optimism Toward:
 1. Self
 2. Society
- VII. Other Areas of Consideration:
 1. Humor
 2. Style of Expression
 3. Imagination/Fantasy
 4. Sense of Religion
 5. Extra-Curricular Activities

John W. M. Rothney
Professor Emeritus
University of Wisconsin-Madison

1. Don't confuse testing the performance of pupils with inventorying feelings, attitudes, interests, and what are often called personality traits. Although inventories look like tests they are not tests.
2. Don't try to set up some mythical level of ability from a test score and expect a pupil to work up to that level at all times in all areas of study.
3. Don't compare pupils' scores with norms unless there is reason to believe that cultural circumstances are similar.
4. Don't give so many tests that no one has time to interpret them individually to children, their parents, and their teachers.
5. Don't be misled by test titles. Study the items.
6. Don't expect too much from tests. They do not measure all of the school's objectives. And they provide only a small sample of what they do measure.
7. Don't use a test simply because others do. Don't use one unless it serves one of your purposes.
8. Don't be "taken in" by the term reliability. It has a special meaning in testing and measurement that is more limited than the dictionary meaning of reliability.
9. Do use carefully selected tests cautiously. They may help in understanding the individual pupil and suggest next steps in his education.

References

- Rothney, J. W. M., Danielson, P. J., & Heimann, R. A. Measurement for Guidance. Harper & Bros., 1958.
- Rothney, J. W. M. Methods of Studying the Individual Child: The Psychological Case Study. Blaisdell Publishers, Waltham, Mass., 1968.
- Cronbach, L. J. Essentials of Psychological Testing. Harper & Bros., 1960.
- Baurenfend, R. H. Building a School Testing Program. Houghton-Mifflin Co., 1963.
- Buros, Oscar. Mental Measurements Yearbook. Gryphon Press. Several years.

HIGH SCHOOL READING LIST

NAME _____ SCHOOL _____

Please answer the following questions about your general reading.

1. About how much time do you spend each week reading things you do not have to read as part of your school assignments? Check the appropriate blank.

Hours: 0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _

9 _ 10 _ 11 _ 12 _ More than 12 _

2. What have the members of the school staff done to encourage your reading beyond required class work?

3. What encouragement have you received in your home?

4. List below the magazines and newspapers you read most regularly.

_____	_____
_____	_____
_____	_____
_____	_____

5. What section of the newspaper do you read first?

6. Then which sections do you read?

7. What reading did you do during the past summer?

8. List below the titles of the books you have read in the last two months.

_____	_____
_____	_____
_____	_____

9. What do you like to read best? Be specific about the non-fiction and fiction areas you read.

E.

Wisconsin Career Education
Planning Model (WCEPM)*

The WCEPM is presently being developed as a general model for career development in the state of Wisconsin. Although still in its formative stages this model provides a useful way for analyzing the career development of gifted and talented students and provides the structure for numerous longitudinal case studies conducted at the Research and Guidance Laboratory.

Career education phases incorporated into the Wisconsin planning model include: Awareness, Orientation, Exploration, Selective Formulation and Action, which are defined as follows:

Awareness: Perceiving and assessing self and self-in-society (school, citizenship, family, work, leisure).

Orientation: Considering general directions and goals.

Exploration: Considering options and vicariously trying on decisions for fit.

Selective Formulation: Valuing, choosing and accepting responsibility for a general direction.

Action: Preparing for and/or engaging in various student and adult roles and achieving among other competencies the occupational competencies set forth in this paper.

*Designed by Philip A. Perrone, James L. Lee, and Dennis W. Engels.

THE INDIVIDUAL SHOULD:

AVARENESS

1. become conscious of the totality of self (interests, abilities, values) and recognize commonalities and differences between self and others.
2. recognize the kinds of choices and plans which he/she has already made and/or others have made for him/her.
3. realize one is increasingly responsible for his/her behavior as one grows older, while acknowledging and accepting one's capability for making decisions and solving problems.

1. identify and develop respect and appreciation for persons in the community with varying life styles.
2. develop an awareness of and identification with adult behaviors and responsibilities.
3. become aware that one's mental and physical health are effected by and effect one's life style.

1. become aware of how to identify and select and use external sources to foster self-development and achieve one's social goals.
2. learn to determine when one or might benefit by seeking assistance from an external source.

ORIENTATION

1. begin evaluating self-characteristics in terms of living out various life styles.
2. realize how social rules and accepting responsibility relate to accomplishing life goals.
3. identify elements of the decision-making process including emotions, values and learn to separate the decision-making process from outcomes.
4. recognize that while future events are largely unpredictable, elements which shape the future can be understood and taken into consideration when formulating life goals.
5. recognize the need to accept responsibility for being flexible in planning his/her life style.

1. recognize how family, work, leisure and citizen activities are influenced by and interact in shaping various life styles.
2. identify factors which can influence life style and describe these influences.

1. see the value and possible limitations of locating and using available resources.
2. begin to identify and utilize needed resources.

EXPLORATION

1. recognize the importance planning can have in utilization of one's time and energy.
2. begin learning and using decision-making skills.
3. modify and/or clarify his/her self-concept in light of personal learning experiences in and out of school.

1. apply basic skills in performing simulated work, family, leisure and citizenship activities.
2. realize relationship between learning activities pursued in childhood and adolescence and entrance into and satisfactory performance in tasks of various adult life styles.
3. recognize how the significance of various family, work, leisure and citizenship activities can vary with age and social circumstances.

1. evaluate resources in light of exploratory activities and life style planning.

THE INDIVIDUAL SHOULD:

SELECTIVE FORMULATION

1. identify and assess personal strengths and weaknesses in order to formulate a preferred life style goal.
2. be able to explain the appropriateness of one's preferred life style.
3. establish priorities in anticipation of a need to compromise accomplishing one or more aspects of the individual's preferred life style.

1. develop skills needed to perform basic functions as a family member, a worker, a citizen and as a person engaged in leisure activities.
2. recognize that environment and one's capabilities interact to affect the achievement of one's preferred life style.
3. develop specific plans, including alternatives, for implementing one's preferred life style.
4. continue to evaluate self in relation to goals.

1. be able to select appropriate resources for facilitating decisions at various choice points.
2. use resources to put into perspective one's experiences and options at various choice points.

ACTION

1. pursue life style goal decisions based on self-knowledge.
2. evaluate decisions based on one's experience.
3. attempt to minimize discrepancies between goals and achievements.
4. continuously appraise short- and long-range goals.
5. be willing to live with and adapt to consequences of one's decisions.

1. assess the role that work, leisure, family and citizen activities will have in determining future training needs and subsequent living standards.
2. tentatively select the means to initiate one's preferred life style.
3. execute plans to involve self in activities of one's preferred life style.

1. maintain resource accessibility in order to retain the option to reprocess if one's life goals need modification

F.

EXAMPLE OF AN INDEPENDENT STUDY CONTRACT

Contract for Released Time Independent Study

Student David Nichols Date 2 October 1975
 Teacher Mrs. Paulson Year in School Junior
 Subject Involved Algebra II

Previous courses that generally relate
 Arithmetic Grade School
 Algebra I
 Geometry

Objectives of independent study

1. David's first objective must be that he provides himself a strong, basic foundation for future mathematics courses.
2. He must develop initiative and independent thinking.
3. He must feel an obligation to live up to his own potential rather than be guided by the abilities and inclinations of others.
4. Especially it is desired that David will continue to develop a genuine interest in and love of learning.

Plan of action to attain objectives

David will be released from regular classes and homework to study independently. He will expect to keep up with the material covered in class, and use reference books to supplement this material. However, he will be free to pursue interests purely his own in the field of mathematics. Vannatta, Meserve, and Allendoerfer are suggested for supplementary texts.

Evaluation

He will take regular class tests, but will not be placed on the class curve. His independent work will be evaluated by the teacher in informal discussions. Independent study will continue as long as both the teacher and student feel it is beneficial.

Mrs. Paulson
 Signature of Teacher

David Nichols
 Signature of Student

Mrs. R. Nichols
 Signature of Parent

For a variety of independent study contracts for use with gifted students, write to: Office of Superintendent of Public Instruction
 State of Illinois

G.

Individualized and Group Programs for Gifted High School Students

Individualized Programs for Gifted High School StudentsProgram

1. Try-out vocational experiences
2. Auditing classes
3. Enrollment in two simultaneous classes
4. Enrollment in college classes
5. Early college admissions
6. Early graduation from high school

Group Programs for Gifted High School StudentsProgram

1. Short-term symposia, workshops, institutes
(Less than 1 semester)
2. Long-term seminars (Semester or academic year)
3. Advanced classes which go beyond ordinary school offerings
4. Substitution of higher-level courses for those ordinarily taken in a given grade level
5. High school correspondence courses
6. College correspondence courses
7. Summer courses specifically for enrichment
8. Advanced placement (CEEB)
9. College summer academic institutes (e.g., NSF Inst.)
10. Parent participation in providing enriched educational experiences
11. Use of facilities outside of school during school time

H.

Check Your School Against This
List of Provisions For Gifted Students
In Some Wisconsin High Schools

Check those that are
done in your School

1. Advanced sections in courses are provided and advanced courses are offered. _____
2. Some students do advanced work in college texts. _____
3. Students are permitted to take more than the usual course load. _____
4. Independent study programs are arranged. Teachers arrange consultation periods for students working on special projects. _____
5. College-type seminars designed to introduce topics not ordinarily covered in course work, or to explore course topics in greater length are offered. _____
6. Participation in advanced placement program is encouraged. _____
7. High school or college-level correspondence courses are taken for enrichment. _____
8. College courses are taken at a college while students are still in high school. _____
9. Auditing of classes is substituted for study halls. _____
10. Enrollment in two classes meeting at same hour is permitted for enrichment or when there are schedule difficulties. _____
11. Book clubs are organized. _____
12. Honor study halls (unsupervised) are provided. _____
13. Students act as tutors in fields of special competency. _____
14. Classes for enrichment are offered locally during the summer. _____
15. Encouragement to attend summer institutes is given. _____
16. Students are encouraged to participate in many contests, science talent searches and scholarship competitions. _____

Check those that are
done in your School

17. Specialists in the community supplement regular programs,
work with students on special projects, or evaluate students'
work. _____
18. Try-out vocational experiences are arranged. _____
19. Early admission to college is arranged for a few selected students. _____
20. An honors banquet for high-achieving students and their parents
is held annually. _____
21. Graduates in college return to the school to tell students
about experiences in college. _____
22. Schools publish products of students in special annual. _____
23. Follow-up records of graduates are kept. _____
24. Conferences with both parents are held at least once a year. _____

I.

Sample Parent Conference Form

Name of Student _____ School _____ Grade _____
 Counselor _____ Date of Parent Interview _____
 Attended parent conference: Mother only () Father only () Both () Other ()
 If other than parents, explain: _____

The following topics are often
 covered in parent interviews. Any
 one may or may not be considered
 at any session, and others may be
 added:

1. Work and study habits
2. Choice of subjects
3. School activities
4. Community and church activities
5. Use of leisure time
6. Occupational choice
7. Choice of post-high school education
8. Financing college
9. Reading practices
10. Test interpretation
11. Nature of school gifted program/attitudes
12. Part-time employment

Counselor's recommendation for discussion with parents.	Parents' remarks and reactions.
1.	1. Was topic discussed? () Yes () No
2.	2. Was topic discussed? () Yes () No
3.	3. Was topic discussed? () Yes () No
4.	4. Was topic discussed? () Yes () No
5.	5. Was topic discussed? () Yes () No
6.	6. Was topic discussed? () Yes () No

Additional interviewer comments: (Note particularly if promised to take any action on any area so that a followup check can be made).

1. Characteristics of Gifted

- a. childhood
- b. adolescence

2. Parent Role in Education of Child

- a. explanation of gifted program at school
- b. participation of parents in school work & projects
- c. parent involvement with counselor
- d. role in college and financial aid decisions
- e. career development & experience

3. Social Aspects of Gifted

- peers/friends
- teachers
- adults
- sex roles
- value-moral-emotional development

4. Family Aspects

- sibling relations
- common concerns on raising the gifted child
- parent-child communication
- satisfying parental expectations vrs. independence, self-competence

CATEGORIES FOR CONSIDERATION IN FOLLOW-UPS OF GIFTED STUDENTS:
FIRST AND FOURTH YEAR AFTER HIGH SCHOOL

86

- I. General Personal Information
Name, sex, address, family information, year graduated, college attending, program of study, size of college
- II. Assistance received from 1) school counselors; 2) teachers; 3) parents regarding
 - A. Choosing a college
 - B. Financial aid
 - C. Program of study
 - D. Career choice
- III. Reasons for choosing present college & program of study
- IV. Current academic progress
Courses, credits, GPA, personal satisfaction
- V. Participation/leadership role in extra-curricular college activities
- VI. Present self-perception
Strengths and areas of difficulty in:
 - a) academics; b) personal-social areas;
 - c) career choice; d) value development
- VII. Reflections on high school
Essay on high school experiences & opportunities in areas of:
 1. attitude and support of school personnel toward gifted;
 2. areas of personal development (intellectual, emotional, moral, social)
 3. suggestions for improvement and change in high school programs for gifted.
- VIII. Future plans
Education, career, travel, family, personal, leisure

AREAS TO CONSIDER IN THE EVALUATION OF
COUNSELING PROGRAMS FOR GIFTED

I. Goals

1. State objectives of evaluation clearly
2. Establish observable/measurable objectives--avoid triviality
3. Set priorities
4. Goals determine composition and methodologies

II. Composition

1. Counselors
2. Teachers
3. Administrators
4. Parents
5. Gifted Students

III. Methodologies

1. Personal interviews
2. Questionnaires
3. Preparation of Evaluators

IV. Results

1. Ways to avoid misinterpretation/distortion
2. Communication of Results
 - a. Personal meeting to review
 - b. Content & Intent
 - c. Written report
3. Decisions on the Results

FOR THE SCHOOL COUNSELOR:
10 QUESTIONS ON INITIATING COUNSELING & GUIDANCE
PROGRAMS FOR GIFTED STUDENTS

1. What process will you establish for comprehensive identification and selection of gifted & talented students?
2. What are the counseling and guidance needs of your gifted & talented students?
3. What do you want to happen differently with these students?
4. What counseling and guidance areas need the most emphasis in your school regarding gifted & talented students?
5. What kind of special classes, teachers, in-service sessions, or time allotments will be used for these new counseling programs for gifted students?
6. Who will you contact in the school and community for support and assistance in forming programs for the gifted?
7. Who will make the decisions about what happens with the students in this program?
8. What special funds and expertise will be needed for these programs?
9. What difficulties do you expect to encounter while putting these programs into effect?
10. How will these programs be evaluated?

Suggestions Providing for Superior Students'
Enrichment and Acceleration¹

As with any group of individuals it is difficult to talk about gifted and talented as if all students were alike. They are not, and they should not be treated as if they were. With this in mind, the following list of suggestions has been developed to provide educators with "food for thought" for how they might best respond to individual students. Many of the ideas listed can have merit with all students, not only those identified as gifted and talented. Some of the ideas may be better for certain students and not as good for others. Use the list as a stimulus for your thinking--not as a mandate for all.

1. A high standard of scholarship should be required of all those who are capable of it.
2. Class requirements may be reduced for those who have demonstrated proficiency in the material being covered.
3. Students may be given different class assignments. Gifted and talented students may be given assignments of greater length and depth than others. All students need not use the same textbook. Some may use college texts.
4. Students may enroll in advanced classes. Decisions about such enrollments should be made upon evidence of attitudes, previous performances and achievement tests.
5. Students may enroll in two classes which meet at the same time and attend alternately or as instructors arrange it.

¹

Suggestions were generated by the Research and Guidance Laboratory staff at the Marathon County Center, Wausau, Wisconsin (Champ K. Brahe, Director).

6. If a student has study halls and another activity on alternate days, he may audit a class instead of going to the study hall.
7. Students may take more than the usual number of classes.
8. Students may be put in special seminar groups.
9. Honors classes may be offered when numbers permit.
10. Students may elect two-year sequences in which two or more subjects are taught in combination (physics and chemistry, or world history, American history and geography).
11. Students may be encouraged to do additional work within regular classes. Such additional work should not involve just more of the same work.
12. Students may be given advanced or additional high school credit for research work carried out in addition to regular class work.
13. Students may be given special opportunities in music, art, drama, dancing, writing, mechanics, photography, and the like.
14. Students may be given special instruction in reading, spelling, English, mathematics, and other subjects. Many may need reviews or short intensive drills to correct difficulties.
15. When schools are near a college or university, students may take courses at them.
16. Students may participate in the Advanced Standing Classes Placement Program. Address: Program Director, College Board Advance Placement, Box 592, 425 North Street, New York 27, N.Y.
17. Students may participate in independent guided reading programs.
18. Students may participate in independent studies programs in which they sign up for credit with a teacher but which have no scheduled classes.
19. Students may be encouraged to form and take part in discussion groups on topics not handled in the regular classroom.
20. Students may be asked to share reports on research. They can be encouraged to go beyond textbooks into original and other source materials.

21. Students may elect "early bird" classes in skills courses and those that require special equipment.
22. Summer school programs may be offered for enrichment and advancement as well as for make-up work.
23. Students may take a course during the summer under the supervision of a teacher. This permits them to take an extra subject during the following year.
24. Students may take university correspondence courses.
25. Students may attempt to complete four years of high school in three years or less.
26. Students may enter college under the early admission plan approved by the University of Wisconsin and many other colleges and universities.
27. Students may act as assistants in classes and as laboratory assistants in science classes.
28. Students may do independent work in laboratories and workshops outside of regular classes. The writing of reports on their independent work can be a very valuable experience.
29. Students may participate in essay contests, art and science talent searches, music clinics, forensics contests, etc.
30. Students may participate in community action groups such as recreation and planning committees.
31. Students may be encouraged to participate in forums, special lectures, and other forms of speech activities.
32. Students may participate in special organizational activities such as:
 Teen Age Book Club, 33 W. 42nd St., New York, N.Y.
 Science Talent Search Programs, and
 Junior Engineering Technical Society (the Jets Clubs),
 National Headquarters, College of Engineering, Michigan State
 University, Box 470, East Lansing, Michigan
 Science Clubs of America, 1719 N. St., Washington, D.C.
33. Students should be informed about occupational and training opportunities in the field of study.

34. All students should be required to proofread their written work.
35. Students may be referred to men and women in occupations in which they indicate interest.
36. Students may use the public library during school time when their class work is satisfactory.
37. Competent community members may be asked to appraise students' performances in various areas.
38. Try-out vocational experiences (teaching, nursing) may be arranged for students interested in particular occupations.
39. Community leaders may be used as resource persons in study groups within and without the school.
40. The number of co-curricular activities in which students can participate may be limited.
41. Students who do not volunteer for activities but who could profit from participation in them should be invited to participate.
42. Special facilities (darkrooms, radio studios, greenhouses, observatories), books and periodicals for special interest groups should be provided.
43. Attendance at special institutes and clinics should be encouraged.
44. Provision should be made for special help for those who have difficulties which prevent them from performing at the levels that might be expected. (Examples include spelling, handwriting, speech, inadequate knowledge of arithmetic fundamentals, grammar.)
45. Attention should be called to scholarship opportunities that are available only to certain groups.
46. Conferences should be arranged with both parents throughout the students' high school years to assist in planning for college.
47. Test scores should be interpreted to each student during individual conferences.
48. Provision should be made for adequate library books, references, and periodicals to permit individual research.

49. Successful college students should be encouraged to return to the school to tell students about problems in adjusting to college.
50. A follow-up study of superior students in colleges should be conducted and questionnaires should be kept on file so that students who plan to go to a particular college may learn about it from the students' point of view.

SECTION IV

Consultation

The Research and Guidance Laboratory is staffed by doctoral students from the Department of Counseling and Guidance and is directed by a professor from that department. A prime function of the Laboratory is to provide a demonstration of counseling services through programs offered in participating schools. A second purpose for the Laboratory is to provide staff members an opportunity to gain experience working with personnel and programs in educational institutions. Until recently experience gained centered around counseling programs for gifted students only. In an attempt to share information learned from nineteen years of work with the gifted and to expose staff members to additional counseling experiences, the offerings of the Laboratory have been broadened to include counseling consultation with populations found in educational institutions. To date, staff members have been involved in devising and carrying through an evaluation of a high school counseling department, presenting a communication skills workshop to a high school faculty, developing and implementing a career development in-service program for teachers, and in offering a series of study skill modules at a local high school. Each of these projects was contracted through the Laboratory. The development of the program was primarily the responsibility of a Laboratory staff members, working with a professor from the Counseling and Guidance Department.

The responsibility for successful completion of the contracted task ultimately rests with the Director of the Research and Guidance Laboratory. Therefore, all contractual arrangements were made at this level.

How can the Laboratory Help You?

1) If you would like assistance with a need that can be considered to be counseling and guidance contact

Director, Research and Guidance Laboratory
Educational Science I Building, Room 1052
University of Wisconsin-Madison
1025 West Johnson Street
Madison, Wisconsin 53706
608/262-2878

2) An appointment will be set up at your convenience to discuss the nature of your concern to determine if the Laboratory can be of assistance.

3) If the Laboratory staff does have the needed expertise and can offer the needed service, and you desire this service a contract will be drawn which will specify what is to be accomplished, by whom it will be accomplished, when the task will be completed, and what the service will cost.

4) Remember, as with all services offered by the Research and Guidance Laboratory, approximately two-thirds of the cost of operation is borne by the University. The Laboratory offers community service as a mean of providing professional experiences for participating Laboratory staff members. Education of the Laboratory staff and personnel from schools with whom the Laboratory staff work is the primary goal.

In-Service Packages

One of the missions of the Research and Guidance Laboratory has been to provide faculty of participating schools with offerings which can help them deal better with students. In light of this mission, the Laboratory staff has developed materials which can be used for teacher in-service sessions. Each set of materials is designed to be presented in one to one and one half hour blocks of time. The topics developed to date deal with communication skills, creativity, values clarification, decision making and career development.

Communication Skills: Presentation and exercises demonstrate how communication can be enhanced or impeded in school related situations. Implications for programming are included.

Creativity: Presentation and exercises deal with facilitation of appropriate group atmosphere for maximizing the use of each group member's ideas. Principles used have application in faculty meetings as well as in instruction.

Values Clarification: A rationale for values clarification is presented. Commercial materials are introduced. Exercises are used to provide participants an experience with the concept. Applications to the classroom are discussed.

Problem Solving: Problem solution can take many forms. The purpose of the approach used is to introduce a variety of systems and to give participants exposure to one in some depth.

Career Development: A career development model is presented. Applications to the classroom are discussed.

For further information on any of these packages please contact the Research and Guidance Laboratory.

APPENDIX A

Projects

This section is a summary of some of the projects that the Laboratory has conducted with several school systems.

WATERLOO

The 1975 program for Waterloo High School illustrates how the Laboratory can function in an individualistic way with a school. The school counselor at Waterloo expressed need to help a particular group of students realize relevance and meaning about their values and lives. A program was developed to make the school's visit to the Laboratory consistent with these needs. Emphasis was placed on values clarification and individual needs.

A. One-third of the students did a values clarification exercise. This group was composed of students from grades 9-12 and was designed to enhance sharing of different viewpoints and feelings. Also, efforts were made to get students to think of themselves as growing young people instead of freshmen or sophomores.

B. One-third of the group had individual interviews with a Laboratory counselor. Each student was assigned a counselor on the basis of particular student needs. The exception to this was the freshmen who were interviewed as a group since it was their first visit to the Laboratory.

C. One-third of the students wrote an open-essay question given at the Laboratory or visited with University personnel from a particular area of interest. These students wrote their essays at school and the counselor mailed them to the Laboratory.

In the course of the afternoon each group of students rotated so that every group participated in activities A, B, & C.

At the end of the day the group met in total to share feelings about the day. Also, a written evaluation for this program was devised at the Laboratory. The students completed this evaluation and this information is being used to assess activities for a program for next year.

Trip to Waterloo:

Several weeks later the Laboratory staff visited Waterloo. Again, provisions were made to meet the expressed needs of the school. In the morning Lab counselors met with parents of students on an individual basis. These meetings were used to exchange information between home and the Lab about each student. The director of the Laboratory met with the principal and the school counselor to discuss goals and directions for Waterloo's future participation in the Laboratory.

The school counselor had indicated to the Lab staff before the visit that there was a need for a communication skills session for the faculty. The Lab staff devised a program that seemed most suitable for Waterloo. In the afternoon there was a faculty meeting where the Lab staff discussed principles of communication. Styles of communication focusing on the ideas of Virginia Satir were presented. Discussion between faculty and staff followed the exercises, sharing feelings and summarizing the afternoon.

Communication Workshop

A communication workshop was presented at De Forest High School, De Forest, Wisconsin, for a district wide faculty.

The aims of this workshop were:

1. To think about communication techniques and principles;
2. To consider communication skills for use in the classroom and among faculty;
3. To participate in communication exercises.

The workshop consisted of an introductory talk on communication. This was followed by exercises in non-verbal communication which helped teachers experience the power of non-verbal communication. Exercises were followed by verbal discussion groups, written value clarification exercises and role plays.

After each presentation there was a discussion about teacher participation and how processes being used in the workshop could be used in the classroom.

Study Skills Workshops

Presenters of the study skills workshop included Dr. Randolph Thrush, Department of Counseling and Guidance, University of Wisconsin-Madison, whose interest in development of study skills is an outgrowth of his work at UW-Counseling Center. Participants included teachers from all schools of the De Forest School System; selection was done by the administrator of each school.

This workshop consisted of six sessions, 1½-2 hours each. The purpose was to train participating members in the area of study skills development--its goals, methods, and evaluation. Participants in turn became trainers themselves in order to instruct other school personnel in the use of study skills materials.

Resources based on the study skills packet were developed by Dr. Randolph Thrush.

Student Needs Assessment and Guidance Department Evaluation

One function of a school guidance department is to conduct research to learn how other people in the school perceive the goals, activities and effectiveness of the guidance program.

To help schools accomplish this, the Laboratory works with school systems to design and conduct student needs assessment projects and guidance department role and function studies.

New Berlin High School

This study was based upon an assessment model which includes, in part, the following sections:

- statement of goals;
- statement of underlying assumptions;
- questionnaire surveys for students, school counselors, teachers, administrators and parents;

--interview questions for all of these groups.

Functions of the project were to

- administer surveys to each student, faculty, counselor, administrator, and as many parents as possible;
- conduct a personal interviews with as many of these persons as possible;
- collect, categorize, analyze the information;
- write up a report on the findings;
- offer conclusions and recommendations in booklet form;
- present the results in a personal meeting with school personnel.

Several distinct benefits resulted:

- a comprehensive picture of the current needs and concerns of the school's youngsters as presented from the students themselves;
- feedback to the guidance department from faculty, students, administration and parents;
- complete report of findings on the current programs and services of the guidance department;
- integrated report putting all of the information into an organized whole;
- suggestions on how these findings might be applied to programs and services which are practical, feasible and tailored to the expressed needs of students and school personnel.

The dual project--student needs assessment and guidance department role and function study--was a comprehensive and practical way to college a volume

of thoughts, feelings and ideas and to organize them into a meaningful and useable product. It was an integral part of a complete evaluation of guidance programs and services and an essential component of New Berlin's school counselor accountability system.

Career Development Program: De Forest

The Career Development Program of the Research and Guidance Laboratory was essentially an in-service presentation aimed at school faculty, school counselors, and administrators.

The goals of this program were: a) to develop awareness in school personnel of the need for career development programs in schools; b) to develop support on their part for the initiation and maintenance of such an educational and life-style development program; c) to develop skills on the part of personnel to implement such a program; d) to develop an effective feedback and follow-up system to evaluate and revamp the program as needed.

The workshop uses the Wisconsin Career Development Model throughout the in-service program. Each career development stage--awareness, orientation, exploration, selective formulation, action--was presented and explored across each dimension--self, social development, resources--with the school personnel.

As experiential format was used, with all personnel participating in a series of simulations, games and exercises which highlighted each career development stage and phase. The workshop thus operated out of a solid theoretical foundation and, through involvement and participation of all personnel, presented the program through concrete, practical suggestions which can be used by all participants.

APPENDIX B

Resources

105

107

. RESOURCES FOR GIFTED & TALENTED STUDENTS

National Organizations:

1. ERIC Clearinghouse on Handicapped and Gifted Children
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
800-336-3728 (Continental U.S. A. only)
703-620-3660 (Virginia residents call collect)
2. Office of the Gifted and Talented
Office of the Gifted and Talented
U.S. Office of Education
Washington, D.C. 20202
202/962-4038
3. The Association for the Gifted (TAG)
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

Regional Offices:

Each of the ten regional offices of education have personnel with assigned responsibilities in the area of education of the gifted and talented.

Region I: Connecticut, Maine, Massachusetts, New Hampshire,
Rhode Island, Vermont

4. Harvey Liebergott
U.S. Office of Education, Region I
John F. Kennedy Federal Building
Government Center
Boston, Massachusetts 02203
617/223-5453

Region II: New Jersey, New York, Puerto Rico, Virgin Islands

5. Robert H. Seitzer, Commissioner
U.S. Office of Education, Region II
Federal Building
26 Federal Plaza
New York, New York 10007
212/264-4370

6. Roger W. Ming, Supervisor
 Education for the Gifted
 State Education Department
 Room 314A, Main Building
 Albany, New York 12224
 518/414-4973

Region III: Delaware, District of Columbia, Maryland, Pennsylvania,
 Virginia, West Virginia

7. Joseph Hendrick
 U.S. Office of Education, Region III
 401 North Broad Street
 Philadelphia, Pennsylvania 19108
 215/597-1011

Region IV: Alabama, Florida, Georgia, Kentucky, Mississippi, North
 Carolina, South Carolina, Tennessee

8. Ellen Lyles
 Program Officer
 Vocational Technical Education
 U.S. Office of Education, Region IV
 50 Seventh Street, N.E., Room 550
 Atlanta, Georgia 20223
 404/526-5311

Region V: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

9. Richard H. Naber
 U.S. Office of Education, Region V
 HEW-OE 32nd Floor
 300 South Wacker Drive
 Chicago, Illinois 60606
 132/353-1743

Region VI: Arkansas, Louisiana, New Mexico, Oklahoma, Texas

10. James R. Frazier
 U.S. Office of Education, Region VI
 1114 Commerce Street
 Dallas, Texas 75202
 214/749-2634

Region VII: Iowa, Kansas, Missouri, Nebraska

11. Harold Blackburn
Assistant Regional Commissioner
U.S. Office of Education, Region VII
Federal Office Building
501 East 12th Street
Kansas City, Missouri 64106
816/374-2528

Region VIII: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

12. John Runkel
Director, School Systems
U.S. Office of Education, Region VIII
Federal Building, Room 9017
1961 Stout Street
Denver, Colorado 80202
303/837-3676

Region IX: American Samoa, Arizona, California, Guam, Hawaii, Nevada, Trust Territory of the Pacific Islands

13. Mary Ann Clark Faris
Information Officer
U.S. Office of Education, Region IX
Federal Office Building
50 Fulton Street
San Francisco, California 94102
415/556-3441

Region X: Alaska, Idaho, Oregon, Washington

14. Robert Radford
Director, Urban & Community Education Programs
U.S. Office of Education, Region X
Mail Stop 628
1321 Second Avenue
Seattle, Washington 98101
206/442-0450

Organizations in the State of Wisconsin:

15. Project DOTT: Development of Total Talent
Ms. Bernadelle Toser, Project Director
CESA No. 7
Route No. 5, Box 280-B
Stevens Point, Wisconsin 54481
715/346-3151
Project Coordinator: Ms. Jean McQueen

16. Project of Racine Unified School District No. 1
Ms. Barbara LeRose, Project Director
1341 Park Avenue
Racine, Wisconsin 53403
414/637-7928
17. Project BRIGHT--Building Resources to Instruct Gifted
and Highly Talented
Mr. Donald Battenberg, Project Director
113 North Third Street
Watertown, Wisconsin 53094
414/261-9424
18. Wisconsin Council for the Gifted and Talented
Ms. Jane Nolte
6833 W. Wells
Wauwatosa, Wisconsin 53213

ERIC Publications:

- 609 Programming for the Gifted
- 636 Gifted and Talented: A General Reading List
- 639 Gifted and Talented Research
- 656 Mathematics and Science for Gifted Children
- 660 Gifted: Handicapped, Disadvantaged and Underachievers
- 661 Gifted Children and the Arts and Humanities
- 667 Creativity
- 668 Identification of the Gifted: Tests and Measurements

Gifted and Talented Children and Youth: Handicapped Gifted
(Selective Bibliography, December, 1973)

The Gifted. Exceptional Children Bibliography Series.
Council for Exceptional Children
Arlington, Va., November, 1969 ED-036-037

The Gifted Children in Connecticut: Practical Suggestions for
Program Development.

Connecticut State Department of Education, Hartford
Bureau of Pupil Personnel & Special Education Services
1968 ED-035-125

Bibliography on High Potential (Gifted)
Mr. Melba M. Miller
University of South Alabama

Annotated Bibliography
Published Research Reports
Research and Guidance Laboratory
University of Wisconsin-Madison

Professional Journals:

Exceptional Children. Council for Exceptional Children
Jefferson Plaza Suite 900
1411 So. Jefferson Davis Highway
Arlington, Va.

Gifted Child Quarterly. National Association for Gifted Children
8080 Springvalley Drive
Cincinnati, Ohio

The National Elementary Principal. February 1972 issue.
(Focus on education of the gifted and talented)

BIBLIOGRAPHY

- Alexander, W., et. al. Independent study in secondary schools. New York: Holt, Rinehart & Winston, Inc.
- Axford, L. B. A directory of educational programs for the gifted. Netuchen, New Jersey: Scarecrow Press, Inc., 1971, 282p.
- Barbe, W. B. Psychology and education of the gifted: Selected readings. New York: Appleton-Century-Crofts, 1965.
- Barron, F. Artists in the making. New York: Academic Press, 1971.
- Biondi, A. The creative process. Buffalo: D.O.K. Publishers, 1972.
- Bish, C. E., (Ed.) Ac'Cent on talent. Volumes 1 and 2, Committee for the Study of Intellectual Talent, Edwardsville, Illinois.
- Broome, E. Educating for the future: 21st century teaching. Raleigh, North Carolina: Department of Public Instruction, Division for Exceptional Children, 1974.
- California State Department of Education. Principles, objectives, and curricula for programs in the education of mentally gifted minors, 1971.
- Conant, J. B. The American high school today. New York: McGraw-Hill, 1959.
- Creativity: The state of the art. Dayton: IDEA Mail Orders.
- Crow, L. D., & Crow, A. (Eds.) Educating the academically able. New York: David McKay Co., 1963.
- Darrow, H. F., & Roach, V. A. Independent activities for creative learning. New York: Teachers College Press, 1961.
- Dell, H. D. Individualizing instruction. Chicago: Science Research Associates, 1972.
- Developing creativity in children. Buffalo: D.O.K. Publishers.
- Dickinson, R. M. Caring for the gifted. Christopher Publishing Co., 1970.

Drews, E. M. (Ed.) Guidance for the academically talented student. NEA Project on the Academically Talented Student. National Education Association, Washington, D.C., 1961.

Durr, W. K. The gifted student. New York: Oxford University Press, 1964.

Education for the gifted and talented. Arlington, Virginia: National Association of Elementary School Principals.

Education of the gifted and talented. Volume 1: Report to the Congress of the United States by the U.S. Commissioner of Education. August, 1971.

Education of the gifted and talented. Volume 2: Background papers submitted to the U.S. Office of Education. August, 1971.

Endicott, F. S. Guiding superior and talented high school students. Chicago: Science Research Associates, 1961.

Fine, B. Stretching their minds. New York: E. P. Dutton & Co., 1964, 255p.

Frederickson, R. H., & Rothney, J. W. M. Recognizing and assisting multi-potential youth. Columbus, Ohio: Charles Merrill, 1972.

French, J. L. (Ed.) Educating the gifted. Section 2. New York: Henry Holt & Co., 1964.

Gallagher, A., & J. Productive thinking of gifted children in classroom interaction. Reston, Virginia: The Council for Exceptional Children.

Gallagher, J. J. (Ed.) Teaching gifted students: A book of readings. Boston: Allyn & Bacon, 1965.

Gallagher, J. J. Teaching the gifted child. Second edition. Boston: Allyn, Bacon & Co., 1975.

Gallagher, J., & Kinney, K. Talent delayed--talent denied: The culturally different gifted child. The Foundation for Exceptional Children, Reston, Virginia, 1974.

Gardner, J. Excellence: Can we be equal and excellent, too. Scranton, Pennsylvania: Harper & Row, 1961.

Getzels, J., & Jackson, P. Creativity and intelligence. New York: John Wiley & Sons, 1962.

- Gold, M. J. Education of the intellectually gifted. New York: McGraw-Hill, 1966, 572p.
- Goldberg, M. L. Research on the talented. Horace Mann-Lincoln Institute Pamphlets, Bureau of Publications, Teachers College, Columbia University, New York, 1965.
- Gordon, W. J. Synectics: The development of creative capacity. Scranton, Pennsylvania: Harper & Row, 1961.
- Gowan, J. C., & Demos, G. D. The education and guidance of the ablest. Springfield, Illinois: Charles C. Thomas Publishers, 1964.
- Gowan, J. C. Issues in the guidance of the gifted and creative students. The Gifted Child Quarterly, Vol. 11, Autumn, 1967, pp. 140-44.
- Gowan, J. C., & Bruch, C. The academically talented student and guidance. Boston: Houghton-Mifflin Co., 1971.
- Gowan, J. C., & Demos, G. D. (Eds.) The guidance of exceptional children. New York: David McKay, 1965.
- Gowan, J. C., & Torrance, F. P. Educating the ablest: A book of readings on the education of gifted children. Itasca, Illinois: Peacock Publishers, 1971.
- Grant, E., & Benzulli, J. S. Sub-cultural indices of academic potential. Storrs, Connecticut: University of Connecticut Press, 1971.
- Grost, A. Genius in residence. Englewood Cliffs, New Jersey: Prentice-Hall, 1970, 224p.
- Guidance for the underachiever with superior ability. U.S. Department of Health, Education & Welfare, Office of Education, Washington, D.C., 1961.
- Guilford, J. P. Intelligence, creativity, and their educational implications. San Diego: Knapp, 1968, 229p.
- Guilford, J. P. The nature of human intelligence. New York: McGraw-Hill, 1967.
- Guilford, J. P., & Merrifield, P. P. The structure of the intellect model: Its uses and implications. Los Angeles: University of Southern California, 1960.
- Hauck, B. B., & Freehill, M. The gifted--case studies. Dubuque, Iowa: Wm. C. Brown, 1972.

- Hildreth, G. H. Introduction to the gifted. New York: McGraw-Hill, 1966, 572p.
- Hollingworth, L. S. Children above 180 IQ. Yonkers, New York: World Book Co., 1942.
- How to enhance individuality in learning. Dayton: IDEA Mail Orders.
- Hoyt, K. B., & Hebeler, J. R. Career education for gifted and talented students. Salt Lake City: Olympus Publishing Co., 1974.
- Individualized instruction: Teaching strategies focusing on the learner. Boston: Allyn & Bacon, Inc., 1977.
- Ishler, R., & M. Creating the open classroom. Buffalo: D.O.K. Publishers, 1974.
- Jacobs, G. When children think: Using journals to encourage creative thinking. New York: Teachers College Press, Columbia University, 1970, 65p.
- Jones, R. M. Fantasy and feelings in education. New York: New York University Press, 1968.
- Kagan, J. (Ed.) Creativity and learning. Boston: Houghton Mifflin, 1963, 289p.
- Kaplan, S. N.; Kaplan, J. B.; Madsen, S. K.; & Taylor, B. K. Change for children. Pacific Palisades, California: Goodyear Publications, 1973.
- Krugman, M., & Impellizzeri, J. H. Identification and guidance of under-achieving gifted students. Exceptional Children, Vol. 26, 1960, pp. 283-86.
- Luecking, E. M., & Sumption, M. R. Education of the gifted. New York: Ronald Press, Co., 1960.
- Marksberry, M. L. Foundation of creativity. New York: Harper & Row, 1963, 177p.
- Marshall, S. Adventure in creative education. Oxford, England: Pergamon, 1968, 229p.
- Martinson, R. A. Curriculum enrichment for the gifted in the primary grades. Englewood Cliffs, New Jersey: Prentice-Hall, 1968, 115p.

- Massialas, B. G. Creative encounters in the classroom: Teaching and learning through discovery. New York: Wiley & Sons, 1967, 274p.
- Mearns, H. Creative power. New York: Dover Publications, 1958.
- Michael, W. B. (Ed.) Teaching for creative endeavor: Bold new venture. Bloomington, Indiana, University Press, 1968. 362p.
- Moustakas, C. E. Creativity and conformity. Princeton, New Jersey: Van Nostrand, 1967, 138p.
- Osborn, A. Applied imagination. New York: Charles Scribner's Sons, 1953.
- Parnes, S. J. Creative behavior guidebook. New York: Charles Scribner's Son, 1967.
- Parnes, S. J. Creativity: Unlocking human potential. Buffalo: D.O.K. Publishers, 1972.
- Parnes, S. J., & Harding, H. F. (Eds.) A source book for creative thinking. New York: Charles Scribner's Sons, 1962.
- Peters, H. J. Counseling services for talented high school students, in Bruce Shertzer (Ed.), Working with superior students: Theories and practices, Science Research Associates, Inc., Chicago, 1960.
- Peterson, T. L., & Sanborn, M. P. Counselor conducted in-service training programs for teachers. Journal of Counseling Psychology, Vol. 19, No. 2, 1972, 156-160.
- Philadelphia Suburban School Study Council. Improving programs for the gifted. Danville, Illinois: Interstate Printers & Publishers.
- Raph, J. B.; Goldberg, M. L.; & Passow, H. Bright underachievers. Studies of scholastic underachievement among intellectually superior high school students. New York: Teachers College Press, Columbia University, 1966.
- Rice, J. P. The gifted, developing total talent. Springfield, Illinois: Charles C. Thomas, 1970.
- Rothney, J. W. M., & Sanborn, M. P. Promising practices in the education of superior students: A demonstration program. University of Wisconsin-Madison, 1968.

- Rothney, J. W. M., & Sanborn, M. P. Wisconsin's research-through-service program for superior students: Personnel and Guidance Journal, April, 1966, pp. 694-699.
- Sanborn, M. P.; Pulvino, C. J.; & Wunderlin, R. F. Research reports: Superior students in Wisconsin high schools. University of Wisconsin, Research and Guidance Laboratory, 1971.
- Sanderlin, O. Teaching gifted children. New York: A. S. Barnes, 1973.
- Smith. Personal and social adjustment of gifted adolescents. Reston, Virginia: The Council for Exceptional Children.
- Smith, J. A. Setting conditions for creative teaching in the elementary school. Boston: Allyn & Bacon, 1966, 281p.
- Stanley, J. C.; Keating, D. P.; & Fox, L. H. Mathematical talent. Baltimore: The John Hopkins University, 1974.
- Syphers. Gifted and talented children: Practical programming for teachers and principals. Reston, Virginia: The Council for Exceptional Children.
- Taylor, C. Widening horizons in creativity: Proceedings of the fifth Utah creativity research conference. New York: Wiley, 1964, 466p.
- Taylor, C., & Williams, F. E. (Eds.) Instructional media and creativity: Proceedings of the sixth Utah creativity research conference. New York: Wiley, 1966, 397p.
- Telford, C., & Sawrey, J. The exceptional individual: Psychological and educational aspects. Englewood Cliffs, New Jersey: Prentice-Hall, 1967.
- Terman, L. M., et. al. Genetic studies of genius. Vol. 1-5.
- Thomas, G. I., & Crescimbeni, J. Guiding the gifted child. New York: Random House, 1966, 206p.
- Torrance, E. P. Creativity. San Rafael, California: Dimensions, 1969, 83p.
- Torrance, E. P. Creativity. What research says to the teacher, series #28. Washington, D.C.: NEA, 1963, 32p.
- Torrance, E. P. Education and the creative potential. Minneapolis: University of Minnesota Press, 1963, 167p.

- Torrance, E. P. Guiding creative talent. Englewood Cliffs, New Jersey: Prentice-Hall, 1962, 278p.
- Torrance, E. P. Rewarding creative behavior: Experiments in classroom creativity. Englewood Cliffs, New Jersey: Prentice-Hall, 1965, 353p.
- Torrance, E. P., & Myers, R. E. Creative learning & teaching. New York: Dodd, Mead & Co., 1970.
- U.S. Office of Education (Leonard M. Miller) Guidance for the underachiever with superior ability. U.S. Office of Education Bulletin, 1961, No. 25, Washington, D.C.: U.S. Government Printing Office.
- Wallach, M. A., & Kogan, N. Modes of thinking in young children. A study of the creativity-intelligence distinction. New York: Holt, Rinehart & Winston, 1965.
- Wallach, M. A., & Wing, C. W. The talented student. A validation of the creativity-intelligence distinction. New York: Holt, Rinehart & Winston, 1969.
- Ward, V. S. Educating the gifted: An axiomatic approach. Columbus: Charles E. Merrill Book Co., 1961.
- Williams, F. E. A total creativity program for individualizing and humanizing the learning process. Englewood Cliffs, New Jersey: Educational Technology Publications.
- Williams, F. E. Classroom ideas for developing productive divergent thinking. Buffalo: D.O.K. Publishers, 1966.
- Williams, F. E. Classroom ideas for encouraging thinking and feeling. Buffalo: D.O.K. Publishers.
- Wing, C. W., & Wallach, M. A. College admissions and the psychology of talent. New York: Holt, Rinehart & Winston, 1971.
- Witty, P. Helping the gifted child. Chicago: Science Research Associates, 1970.

Books for Parents

- Brumbaugh, F. N., & Roshco, B. Your gifted child: A guide for parents. New York: Holt, 1959.
- Camp, W., & Rothney, J. W. M. Parental response to counselors' suggestions. The School Counselor, January, 1970.

Cutts, N. E., & Moseley, N. Bright Children--A guide for parents. New York: Putnam, 1953.

Jessell, J., & Rothney, J. W. M. The effectiveness of parent-counselor conferences. Personnel and Guidance Journal, October, 1965.

Martinson, R., & Delp, J. The gifted and talented: A handbook for parents. Office of County Superintendent, Ventura Co. Schools, Co. Office Building, 535 East Main St., Ventura, Calif., 93001.

Strang, R. Helping your gifted child. New York: Dutton, 1960.

The following may be obtained from: Office of County Superintendent
Ventura County Schools
County Office Building
535 East Main Street
Ventura, California 93001

Developing a state plan for the education of gifted and talented students.
by Martin Burnbaum, J. E. LoCicero, & I. S. Sato.

Providing programs for the gifted and talented: A handbook. by S. Kaplin.

The gifted and talented: A handbook for parents. by R. Martinson & J. Delp.

The identification of the gifted and talented. by R. Martinson.